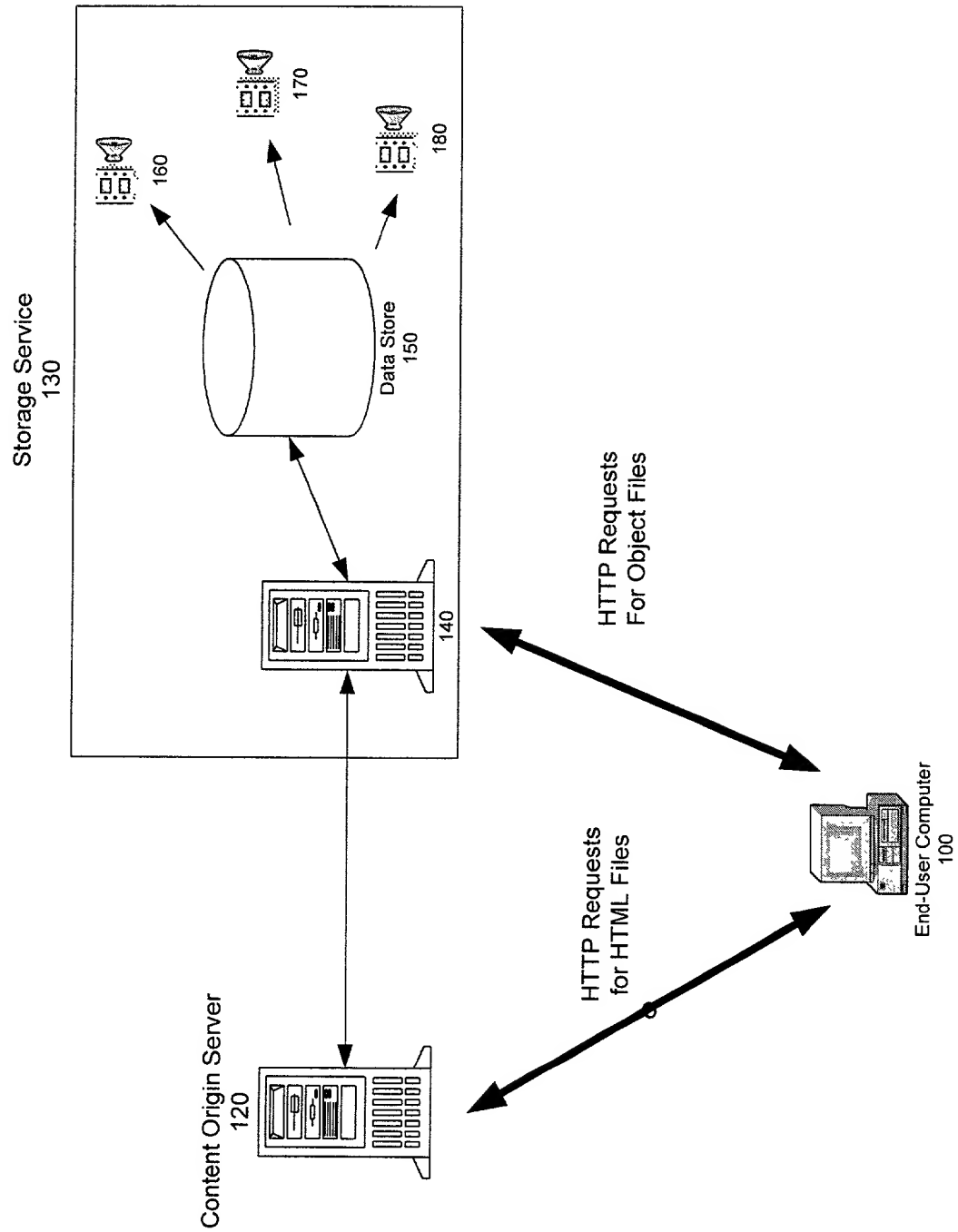
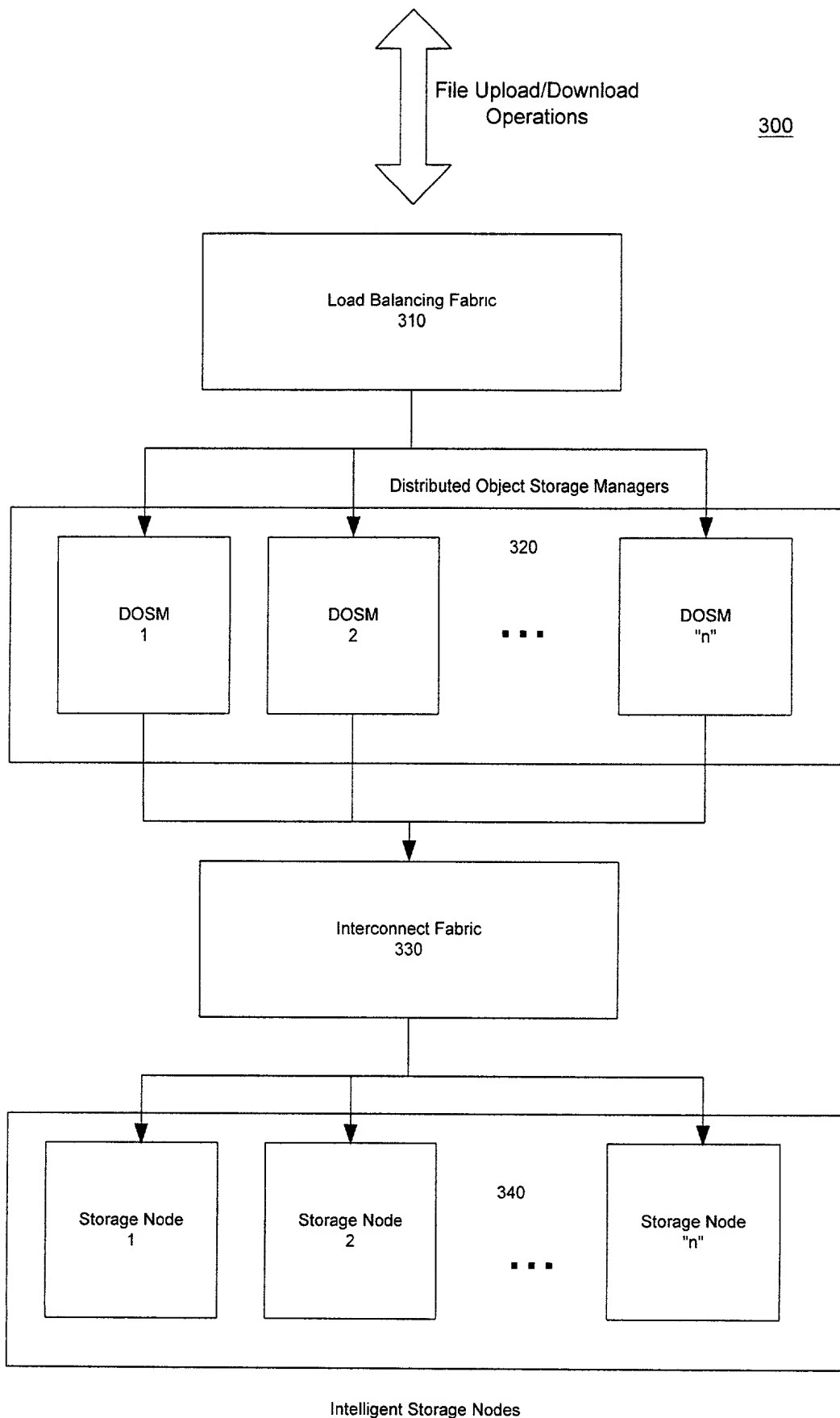


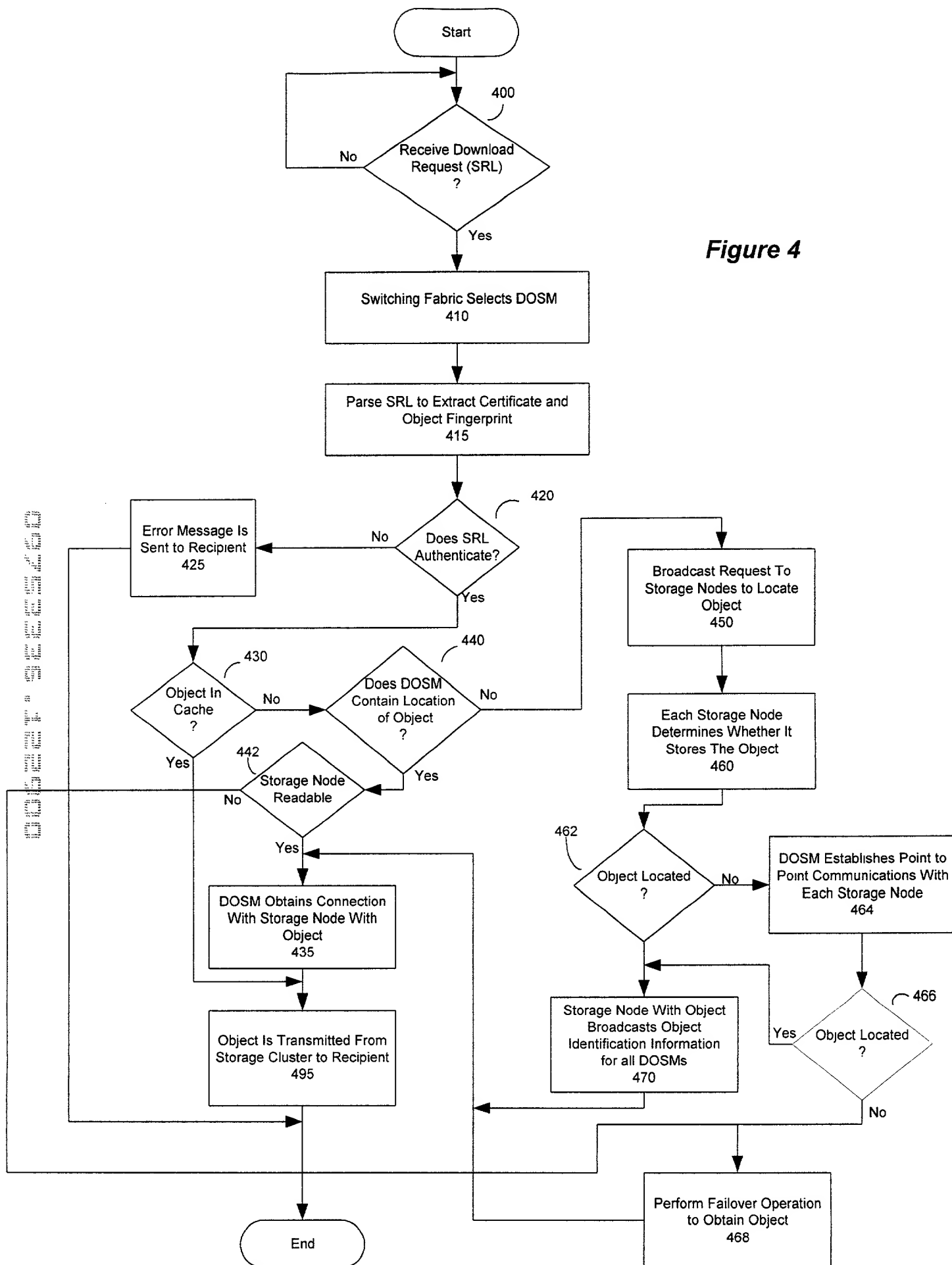
Figure 1



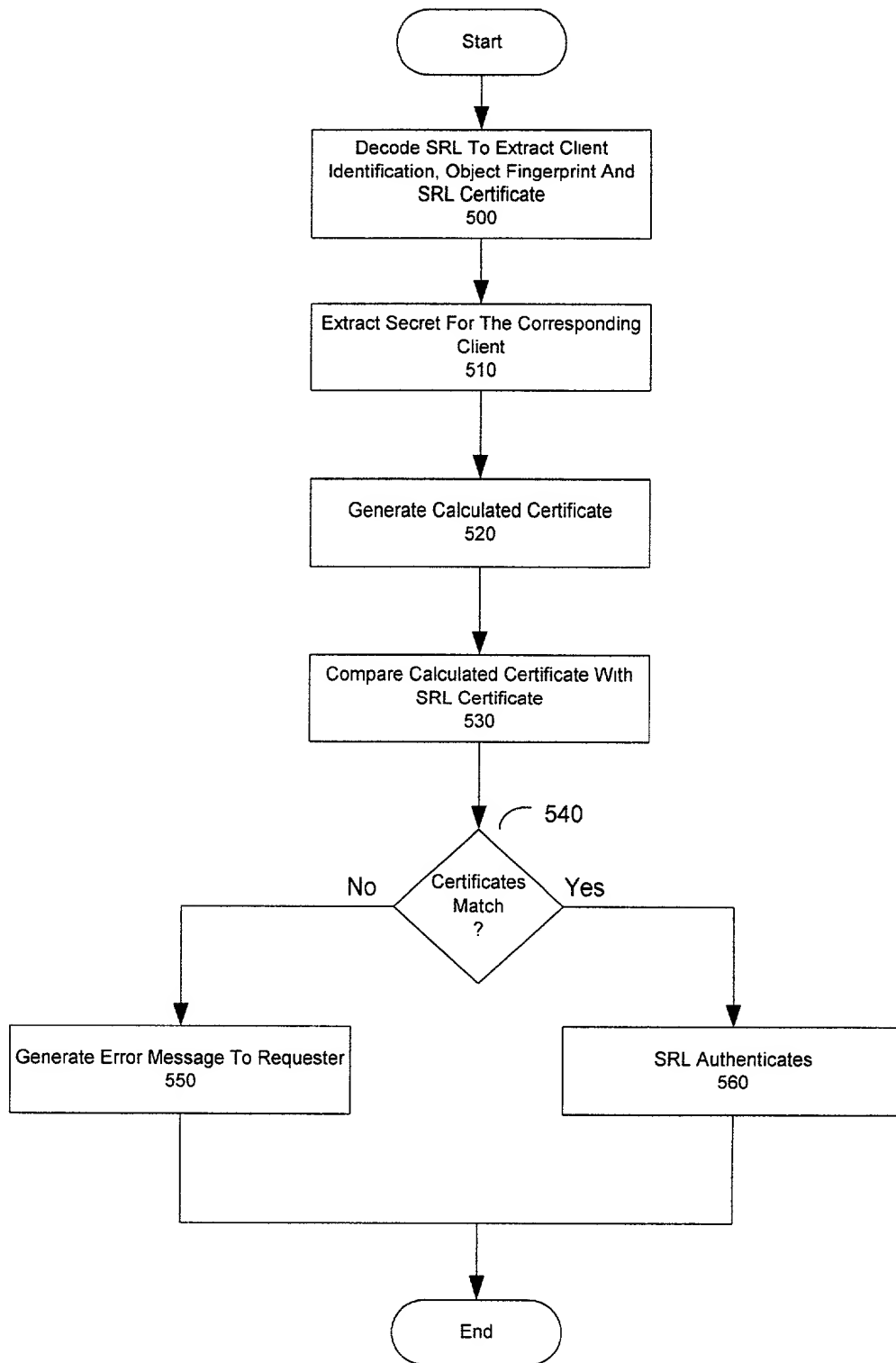
**Figure 2**



**Figure 3**

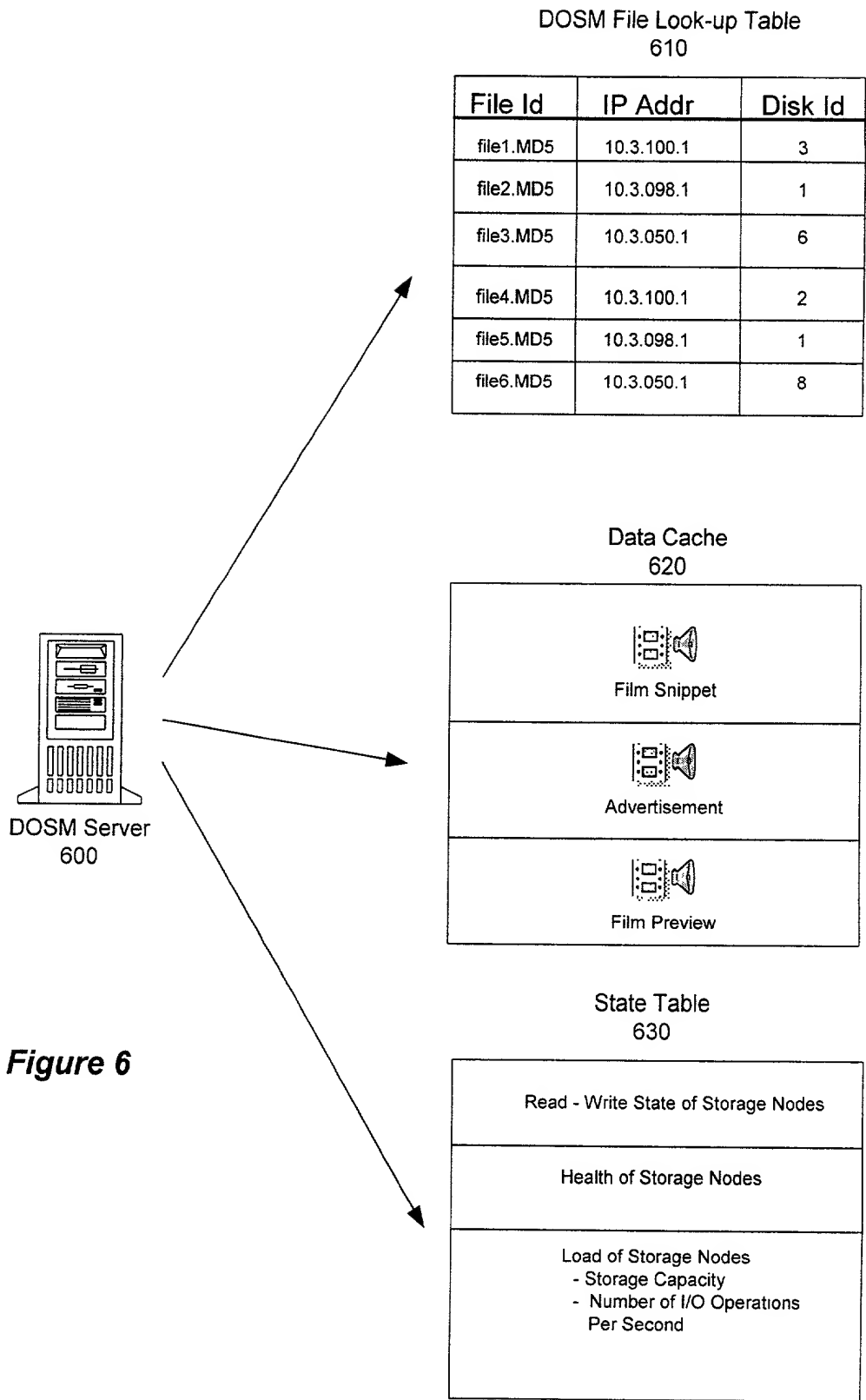


**Figure 4**



**Figure 5**

FIG. 6 is a block diagram of a DOSM Server 600. The server is connected to a DOSM File Look-up Table 610, a Data Cache 620, and a State Table 630. The server is also connected to a network of storage nodes.



**Figure 6**

700

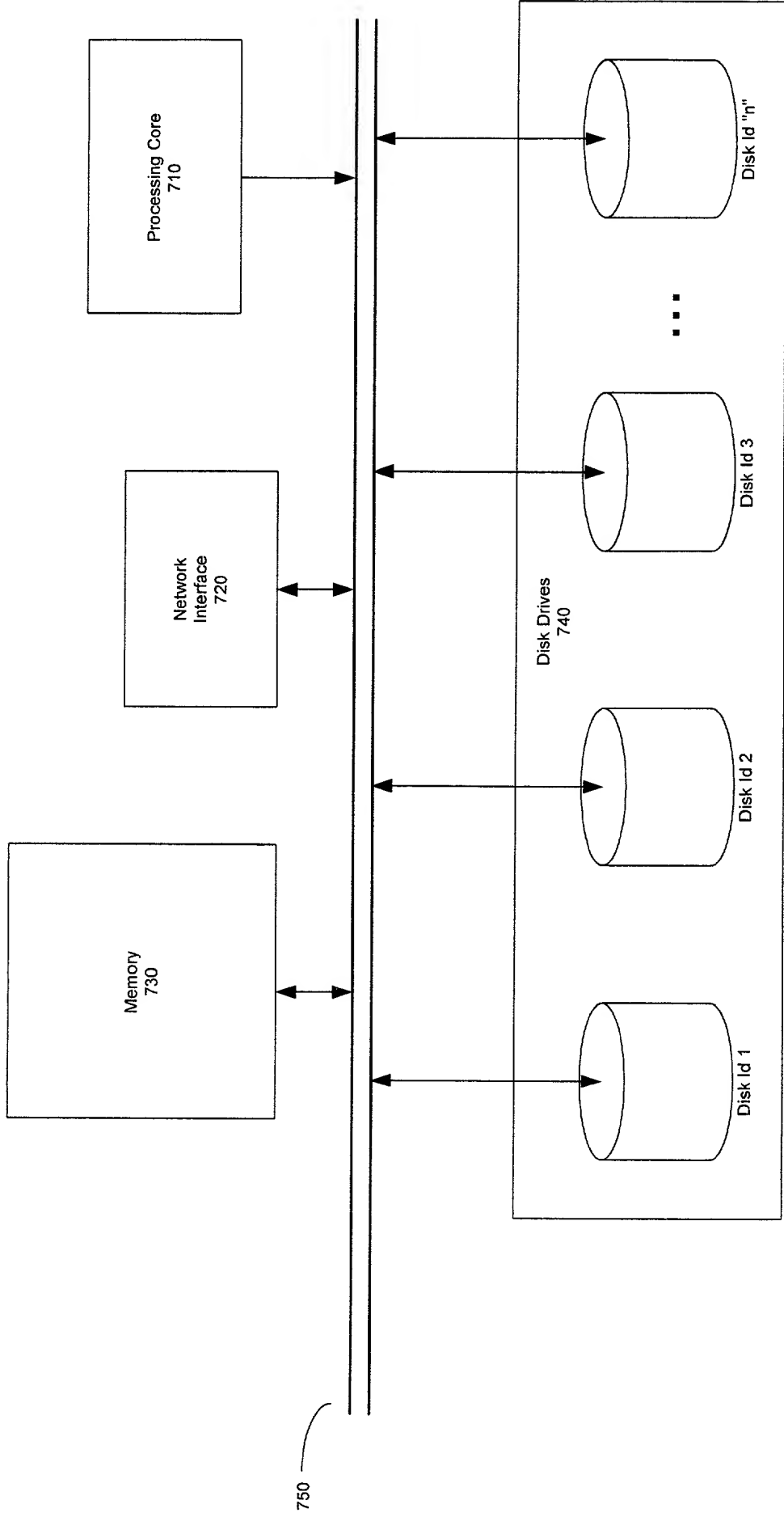
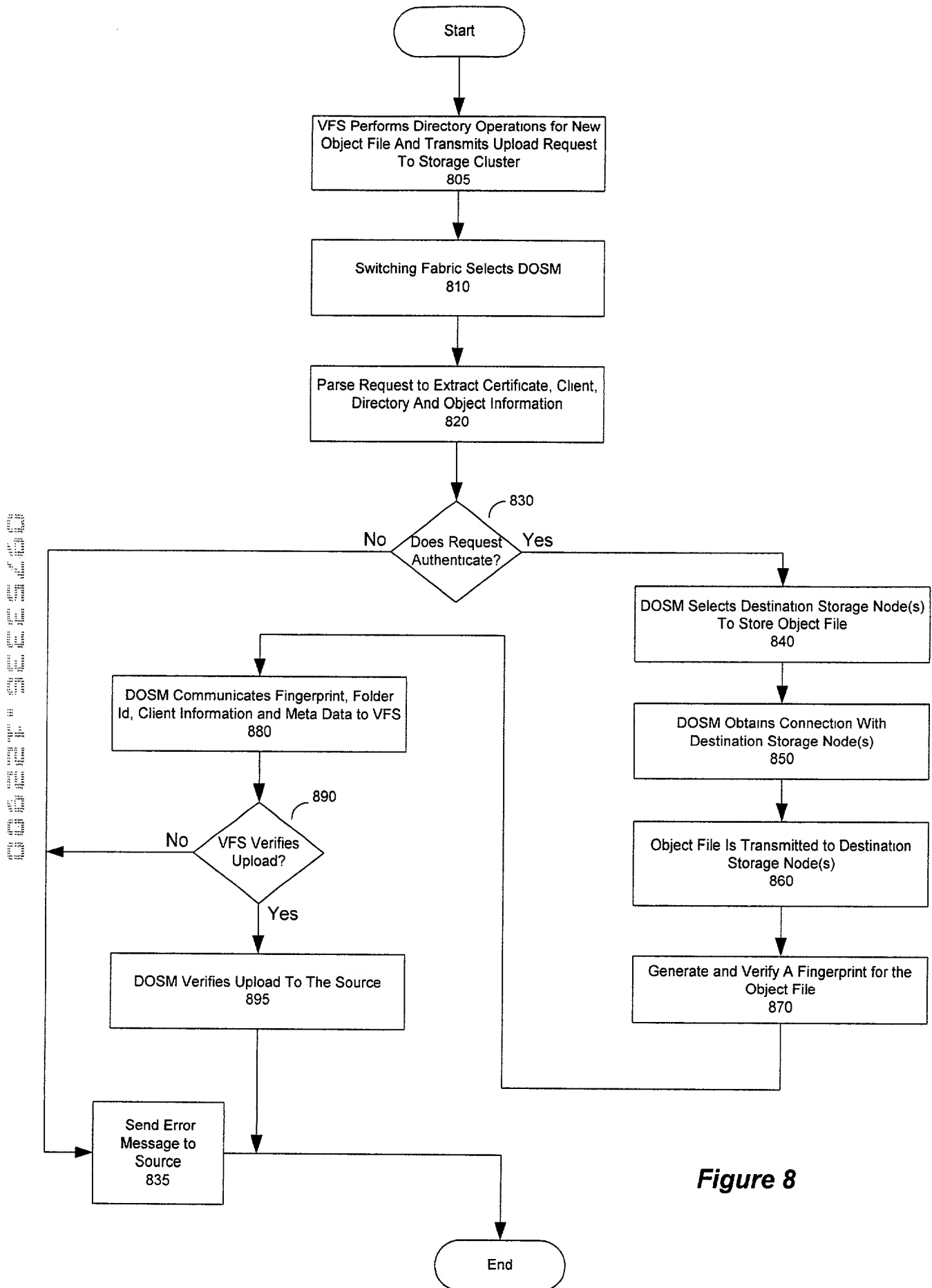
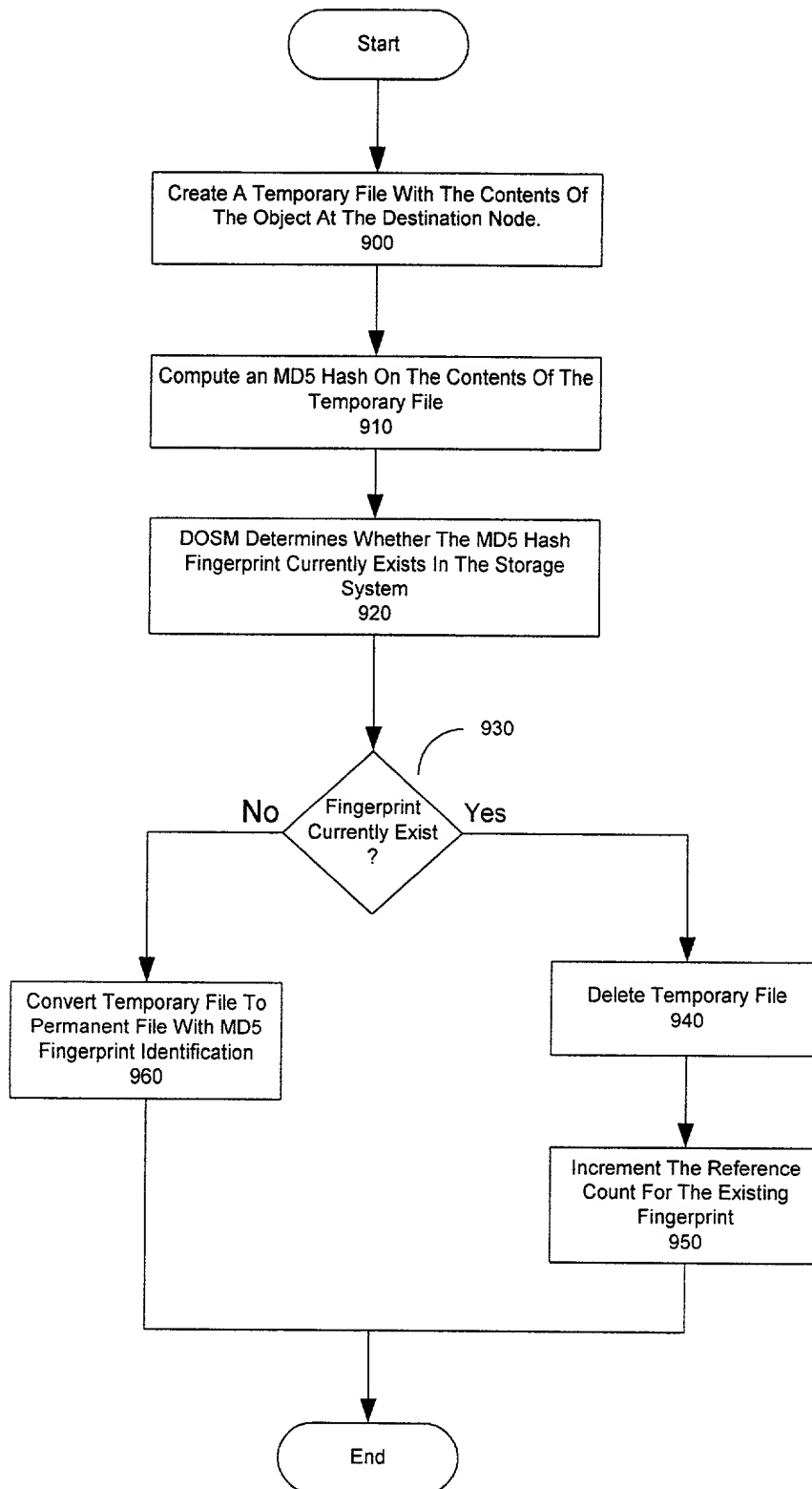


Figure 7



**Figure 8**





**Figure 9**

FIG. 10 is a block diagram of a system architecture for file upload/download operations. The system includes a Load Balancing Fabric 310, which is connected to four Data Cache units (DOSM 1, DOSM 2, DOSM 3, and DOSM "n"). Each Data Cache unit contains a list of files and is connected to the Load Balancing Fabric 310 via a bidirectional arrow. The Load Balancing Fabric 310 is also connected to a File Upload/Download Operations block, which is represented by a large double-headed arrow.

File Upload/Download  
Operations

Load Balancing Fabric  
310

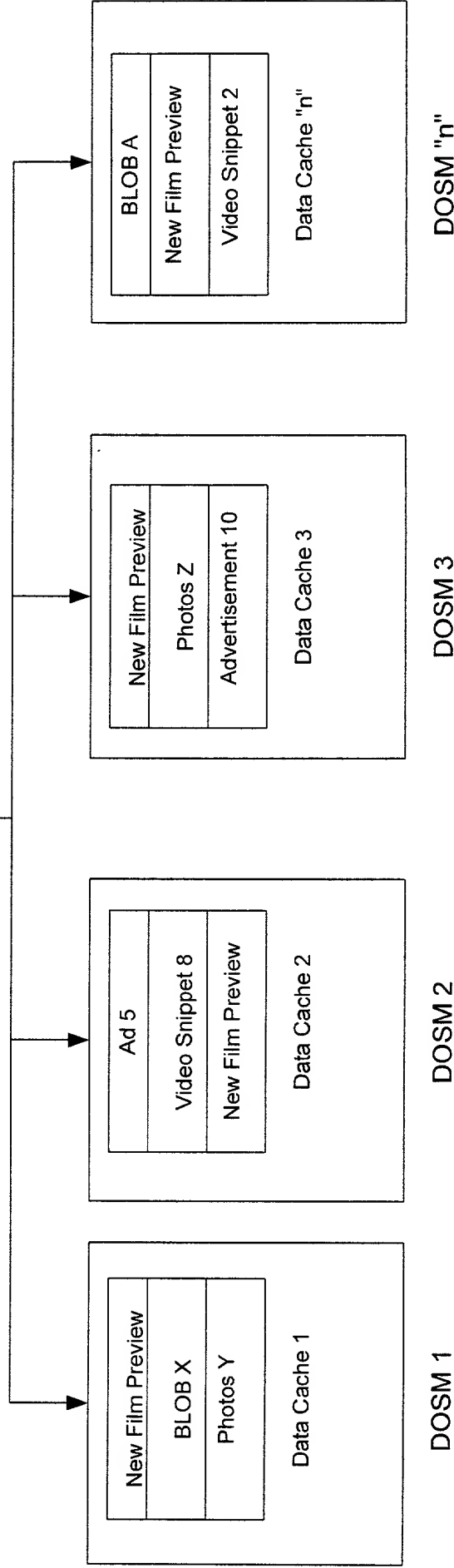


Figure 10

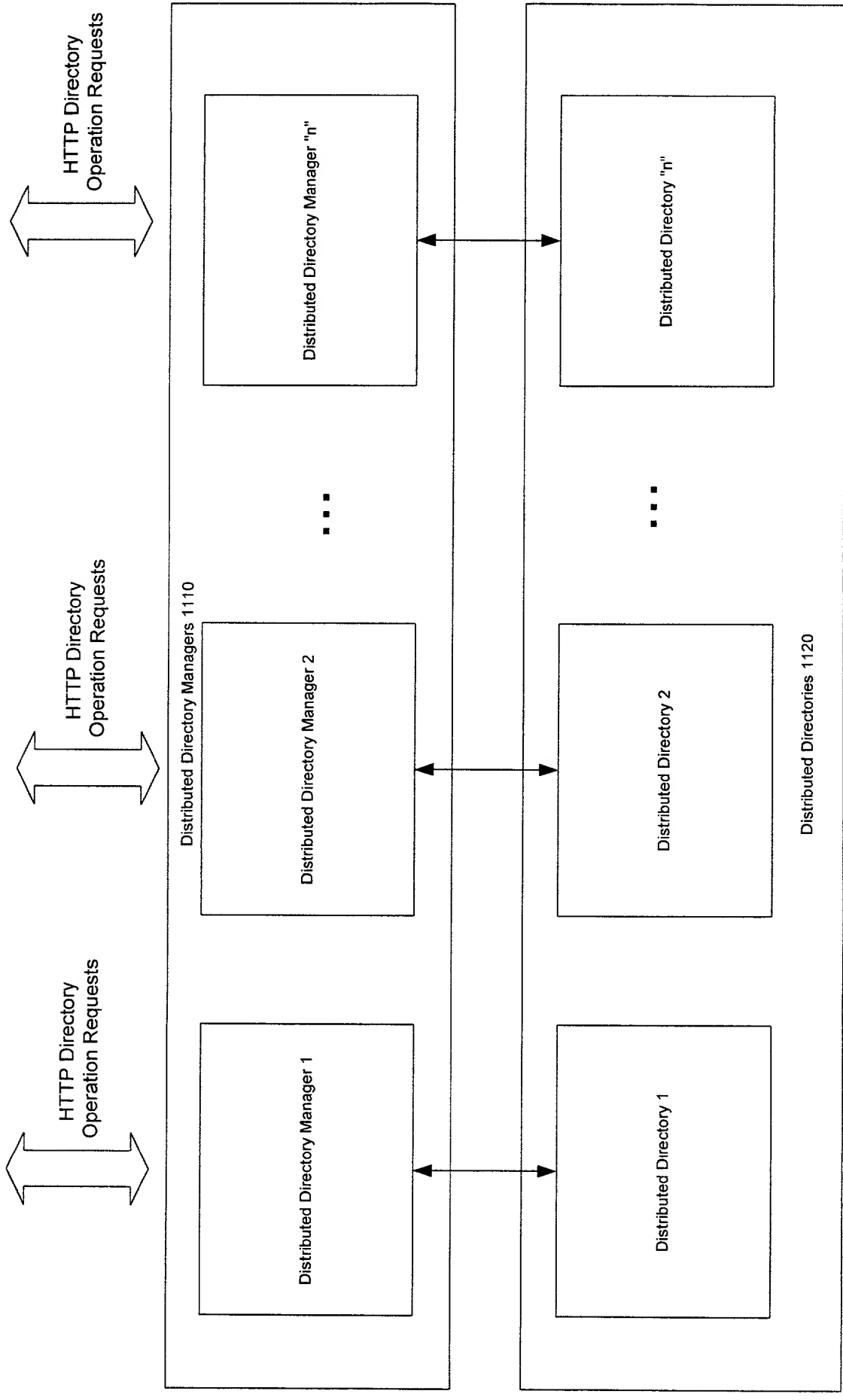


Figure 11

Customer Table

	Customer Name	Customer Reserved Fields
	Customer A	[Customer stores data ...]
	Customer B	[Customer stores data ...]
	Customer C	[Customer stores data ...]
	Customer D	[Customer stores data ...]

1200

Folder Table

Customer Id	Folder Id	Folder Parent Id	Metadata
3	2	-	[Reserved]
3	100	2	[Reserved]
3	251	2	[Reserved]
3	166	251	[Reserved]

1210

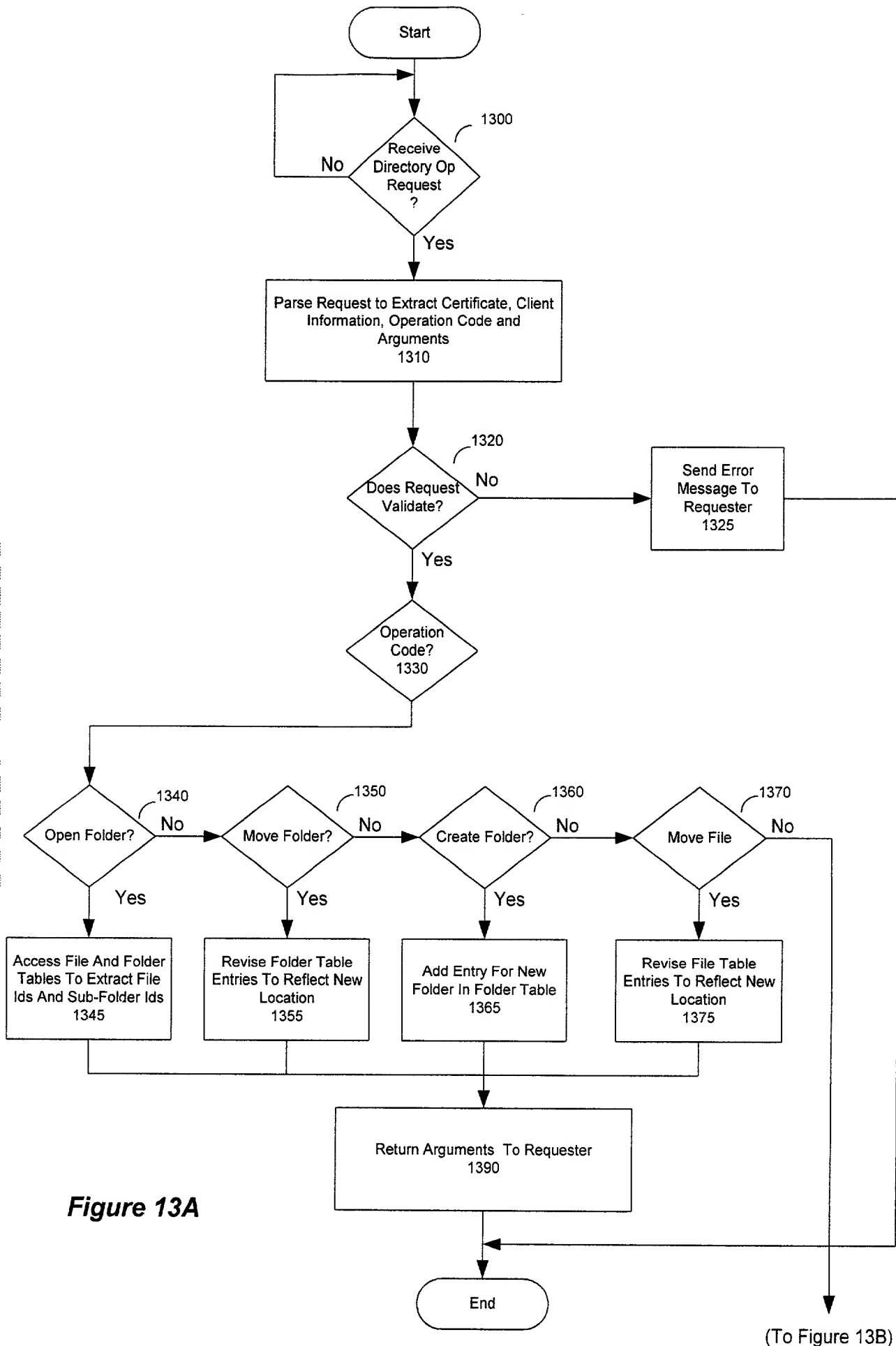
File Table

Customer Id	File Handle	Folder Id	Folder Parent Id	Metadata
3	52.MD5	100	2	[Reserved]
3	55.MD5	100	2	[Reserved]
3	99.MD5	166	251	[Reserved]
3	67.MD5	166	251	[Reserved]

1220

**Figure 12**

FIG. 13A is a flowchart illustrating a process for handling directory operations. The process begins at a Start node, leading to a decision diamond 1300: "Receive Directory Op Request?". If the answer is "No", the process loops back to the input of diamond 1300. If "Yes", the process proceeds to a process box 1310: "Parse Request to Extract Certificate, Client Information, Operation Code and Arguments". From 1310, the flow goes to a decision diamond 1320: "Does Request Validate?". If "No", the process moves to a process box 1325: "Send Error Message To Requester", which then leads to the End node. If "Yes", the flow proceeds to a decision diamond 1330: "Operation Code?". From 1330, the flow branches into four parallel paths based on the operation code: 1. "Open Folder?" (1340): If "Yes", process box 1345: "Access File And Folder Tables To Extract File Ids And Sub-Folder Ids". If "No", proceed to the next decision. 2. "Move Folder?" (1350): If "Yes", process box 1355: "Revise Folder Table Entries To Reflect New Location". If "No", proceed to the next decision. 3. "Create Folder?" (1360): If "Yes", process box 1365: "Add Entry For New Folder In Folder Table". If "No", proceed to the next decision. 4. "Move File?" (1370): If "Yes", process box 1375: "Revise File Table Entries To Reflect New Location". If "No", the process leads to the End node. All four successful operation paths (1345, 1355, 1365, 1375) converge and lead to a process box 1390: "Return Arguments To Requester", which then leads to the End node.



**Figure 13A**

(To Figure 13B)

(From Figure 13A)

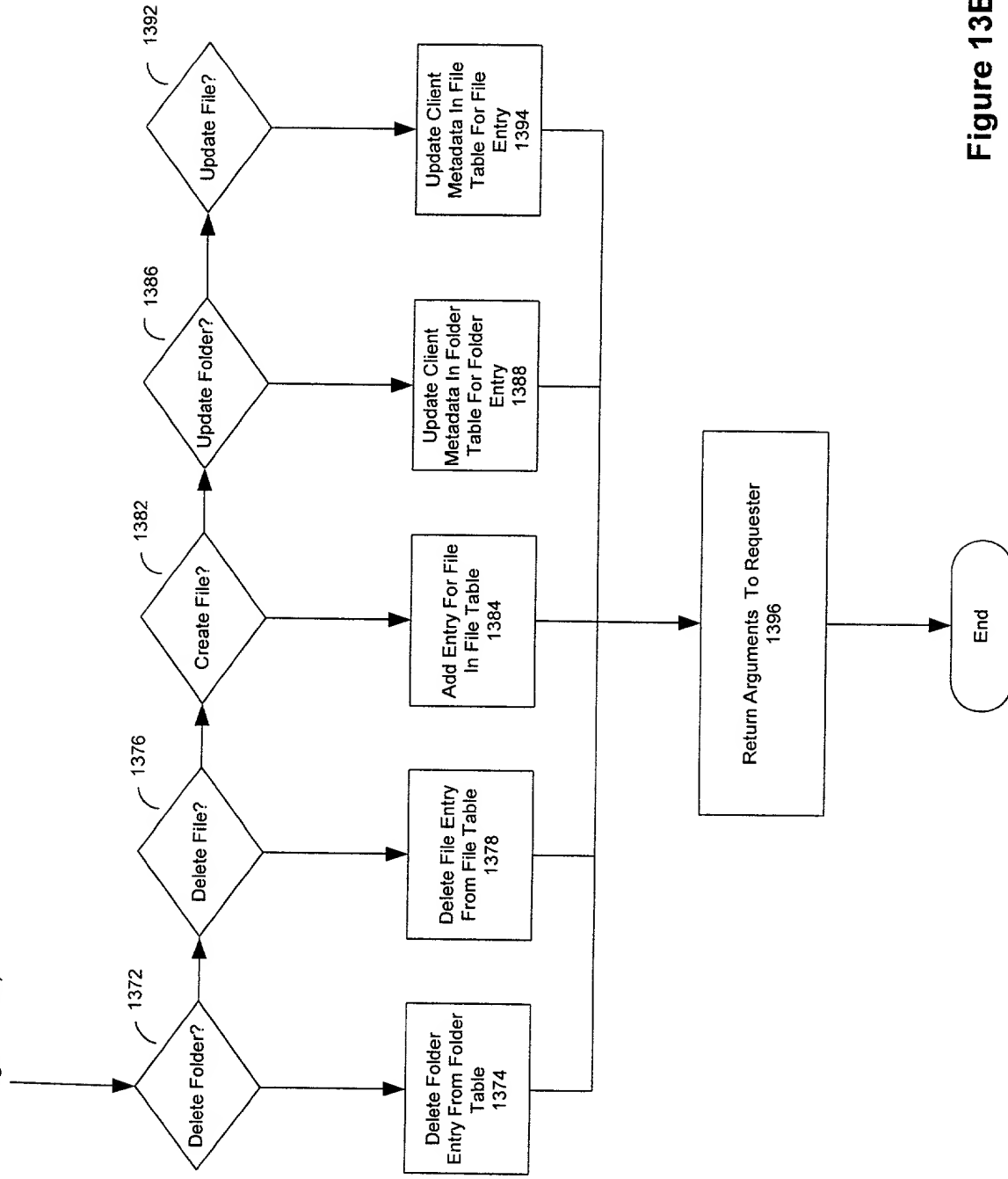
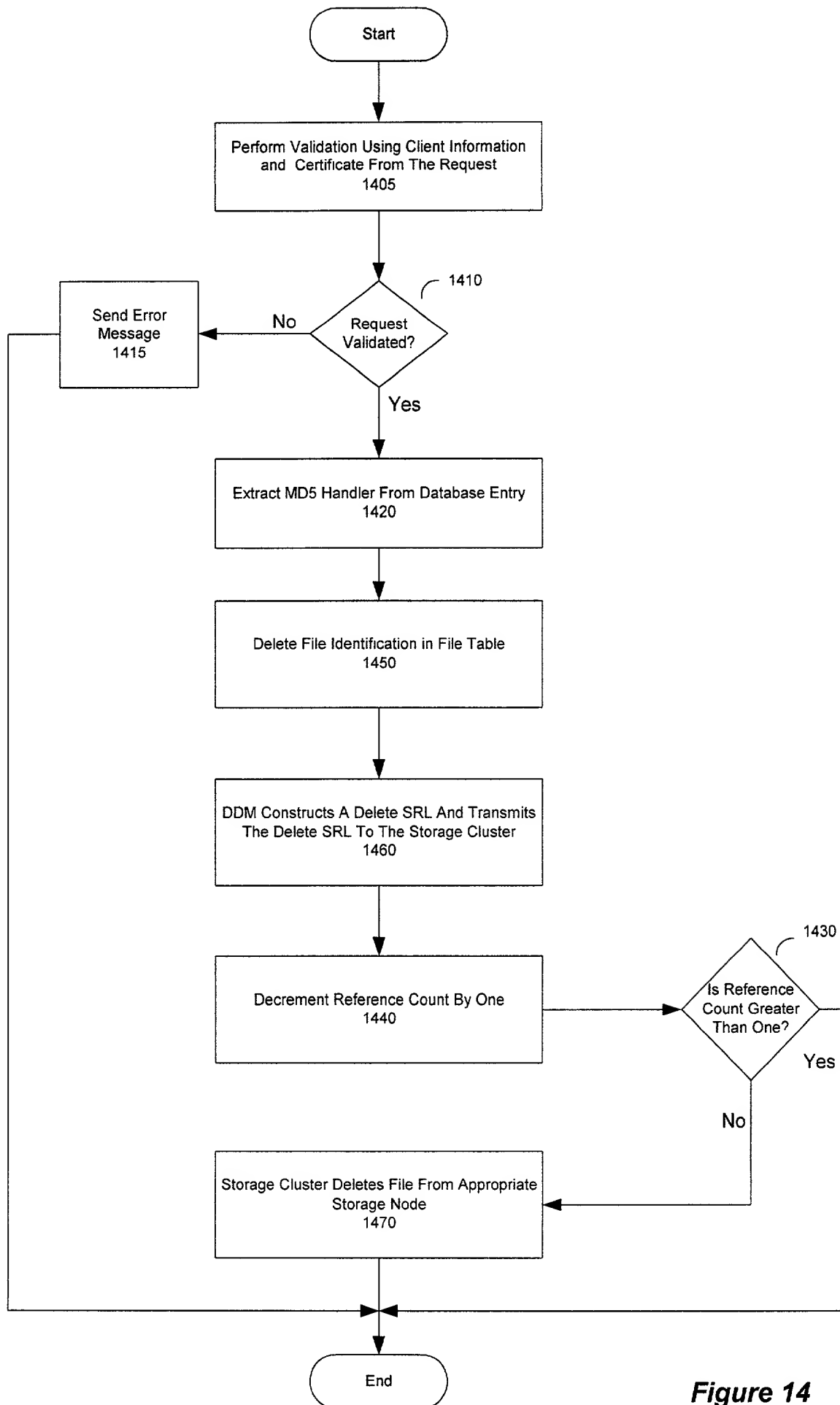
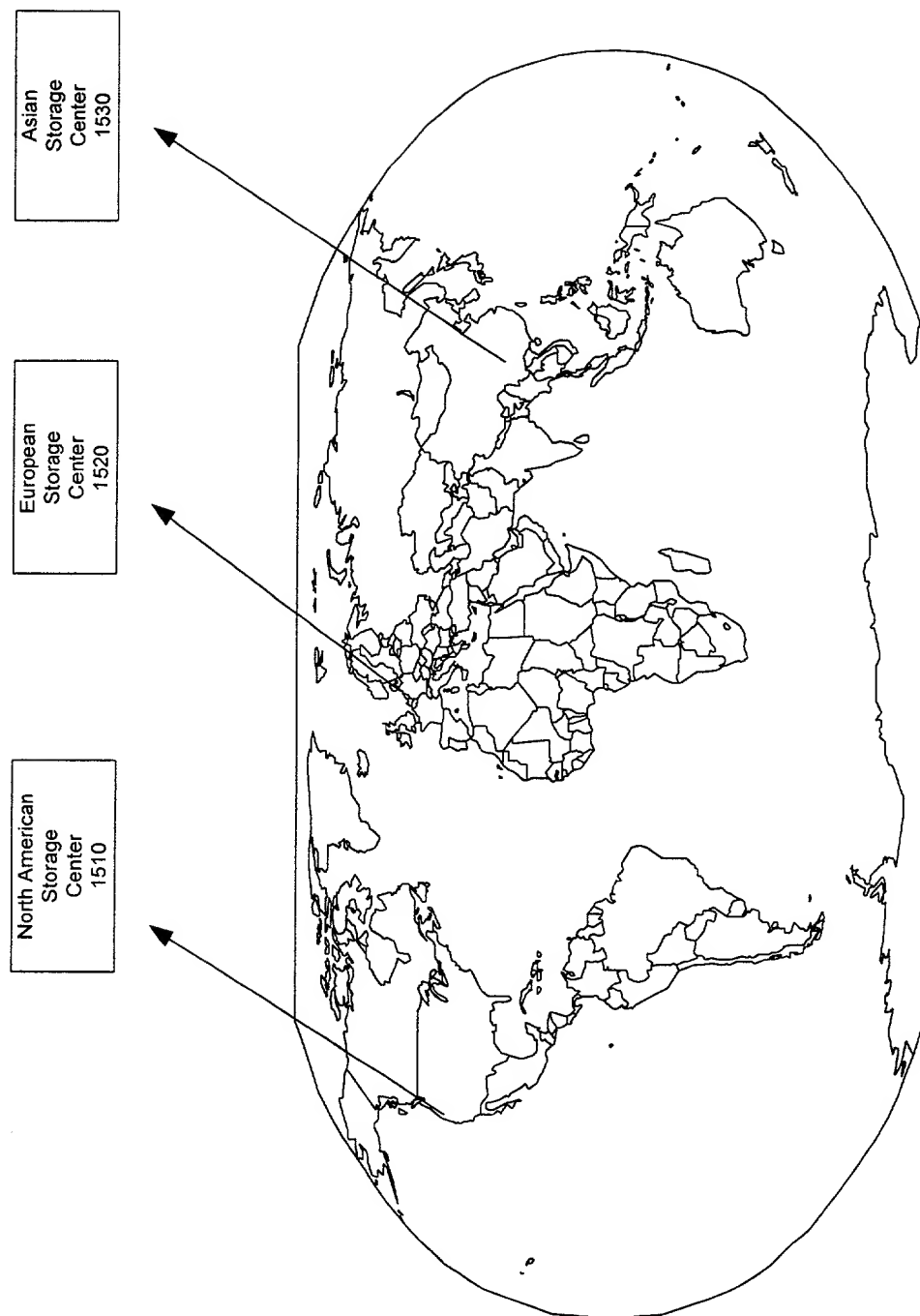


Figure 13B



**Figure 14**



**Figure 15**



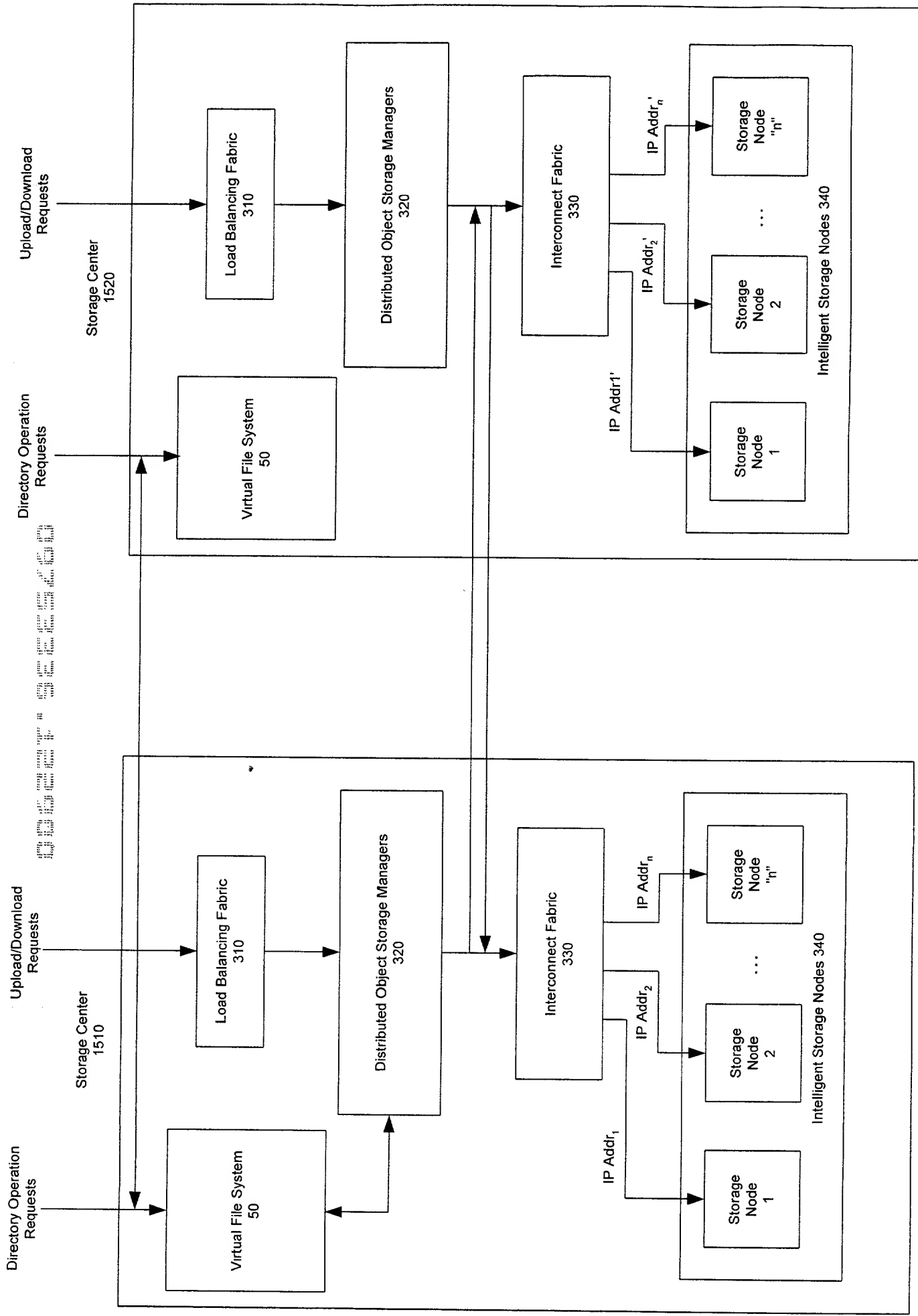


Figure 16

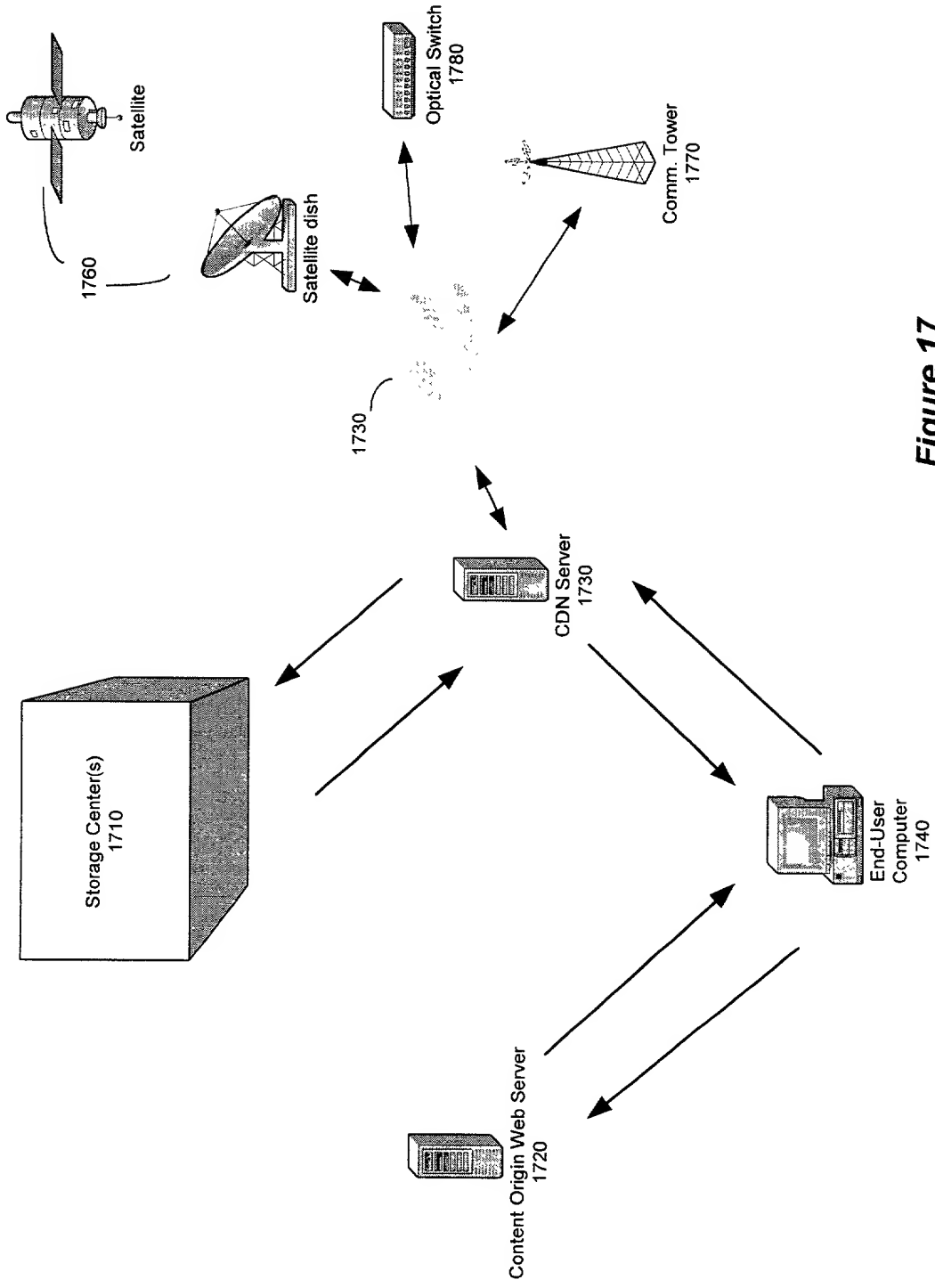
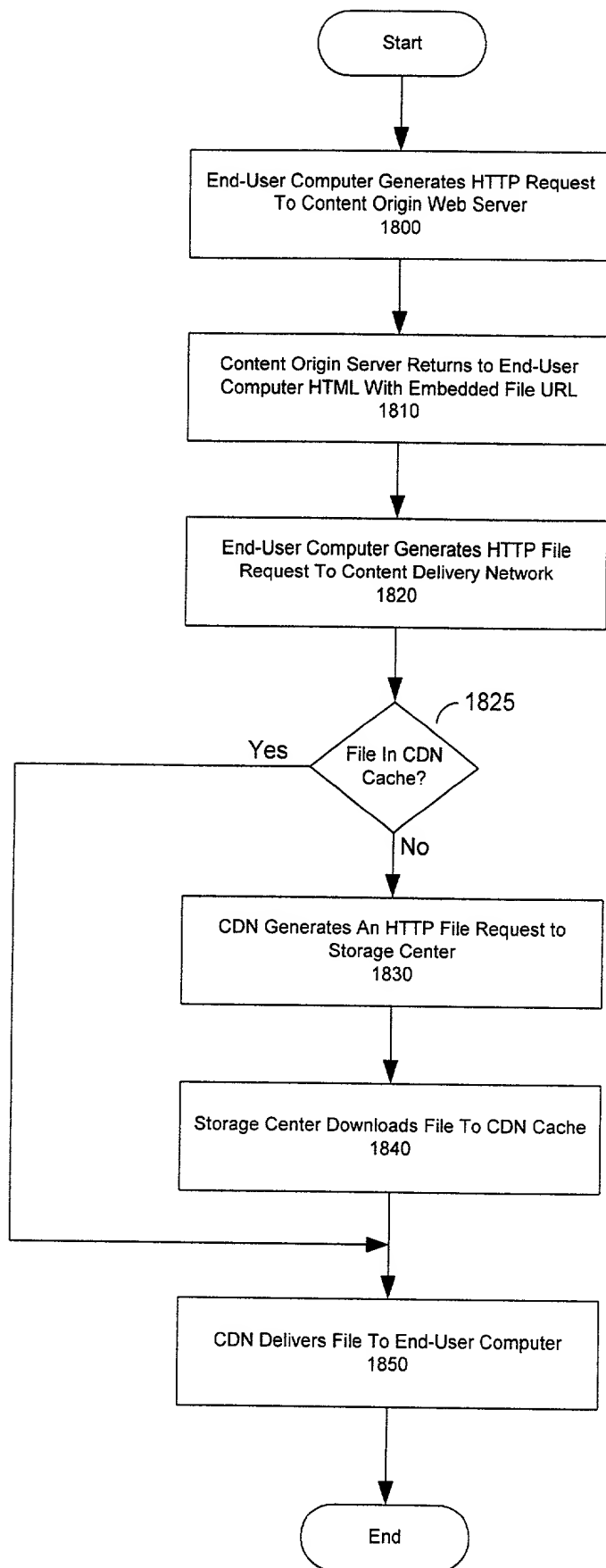
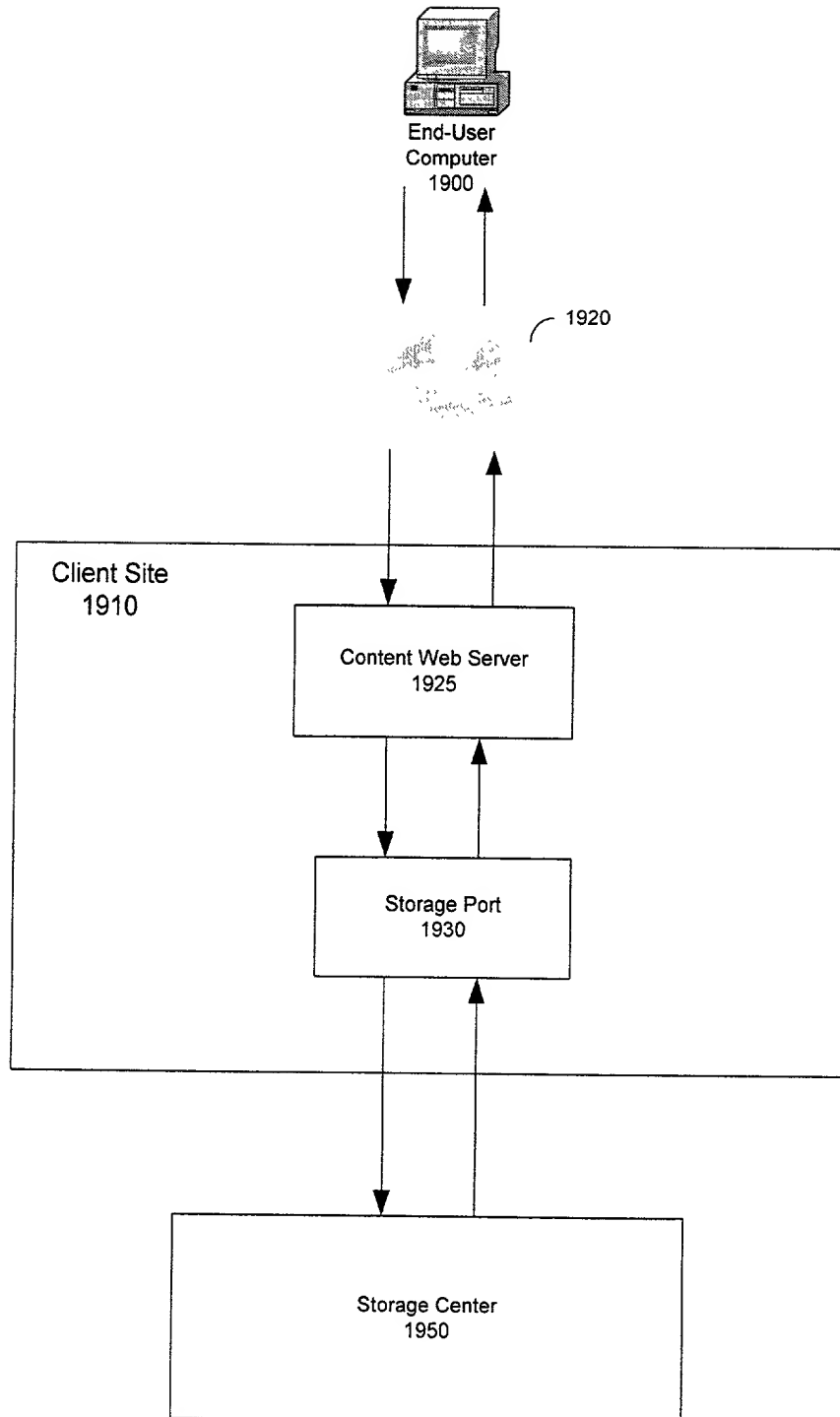


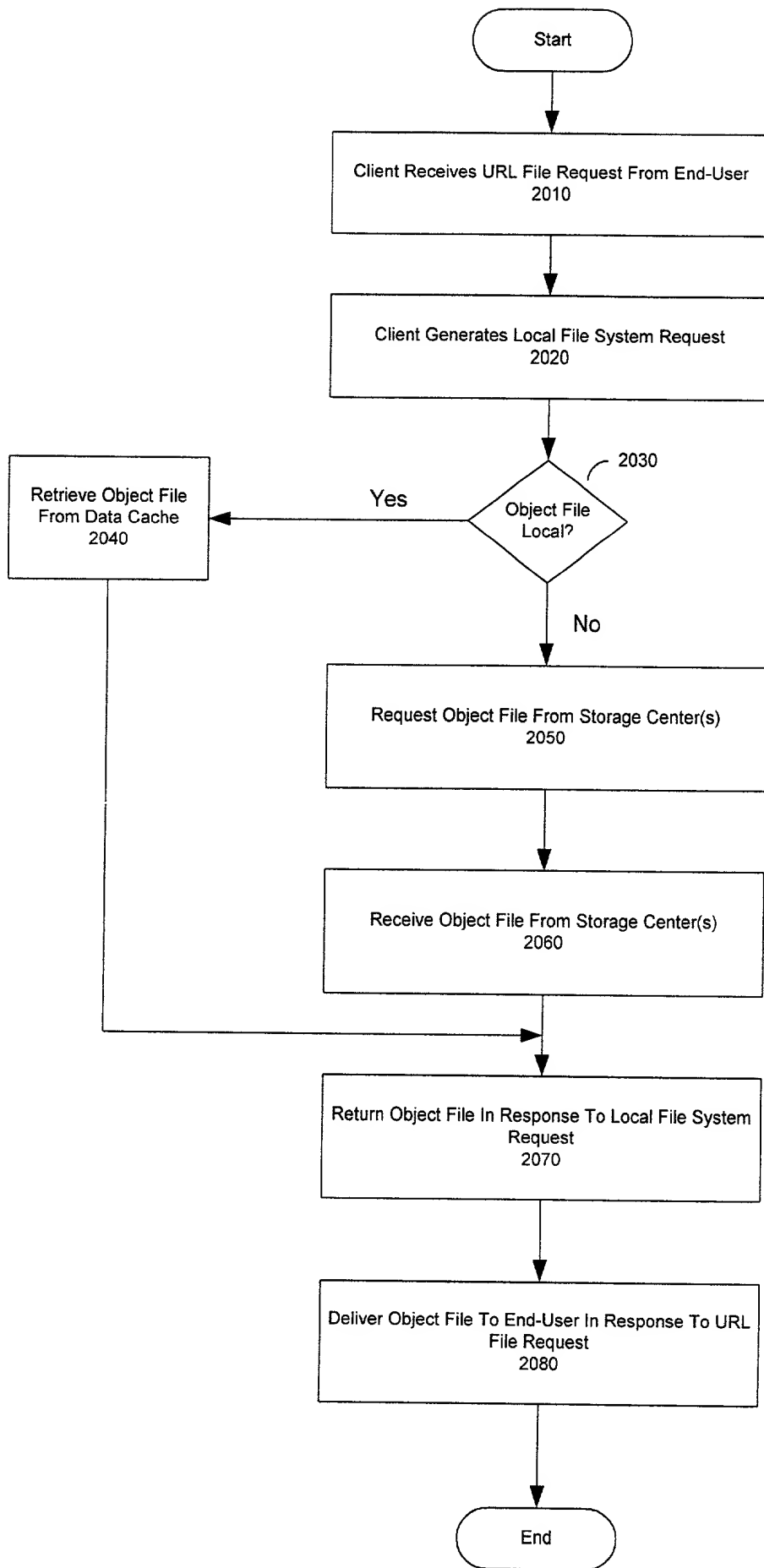
Figure 17



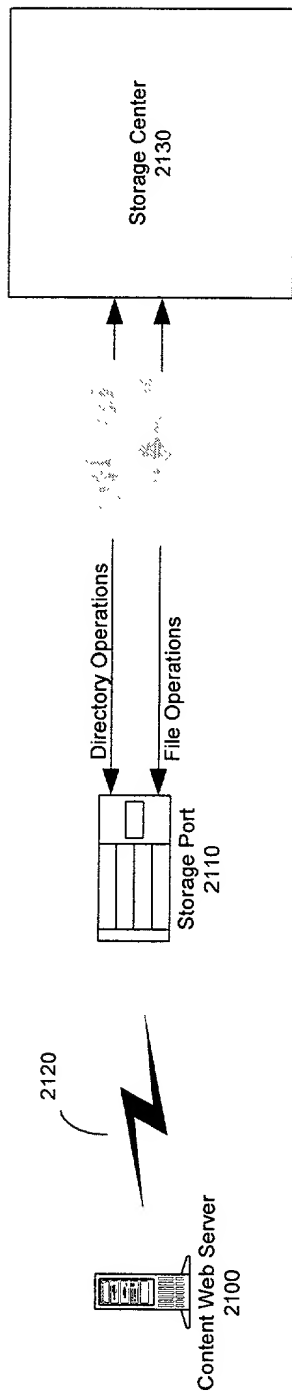
**Figure 18**



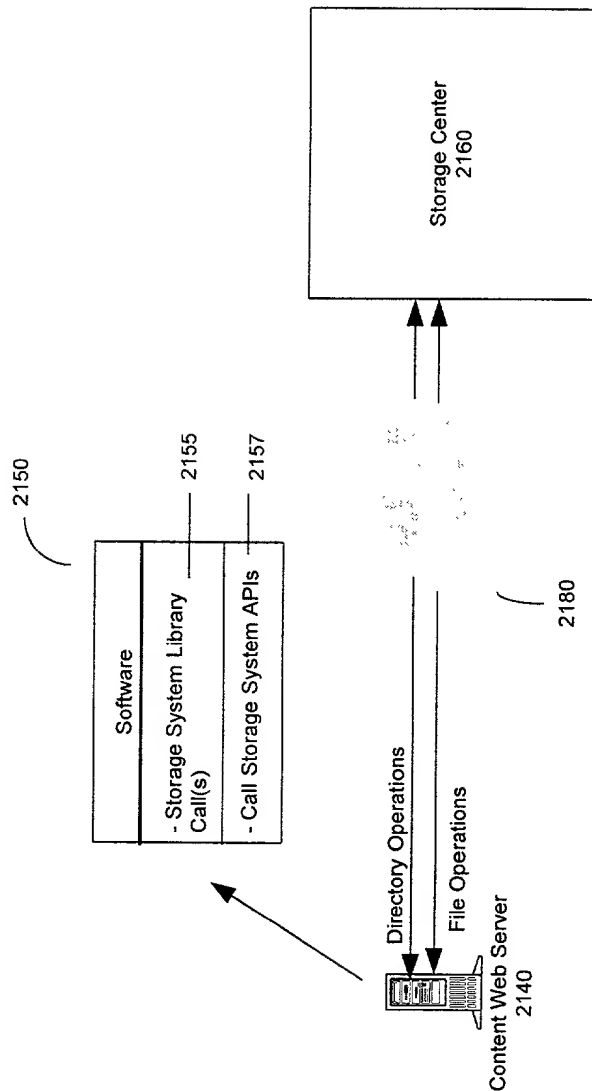
**Figure 19**



**Figure 20**



**Figure 21a**



**Figure 21b**

FIG. 22 is a block diagram of a system 2200 illustrating a storage port 2240 in accordance with the present invention. The system 2200 includes a processing core 2210, memory 2230, and a storage port 2240. The storage port 2240 is connected to the processing core 2210 and the memory 2230 via a system bus 2250. The storage port 2240 includes a storage data store 2240 and a plurality of disk drives 2240, including disk drive 1 and disk drive "n".

Storage Port  
2200

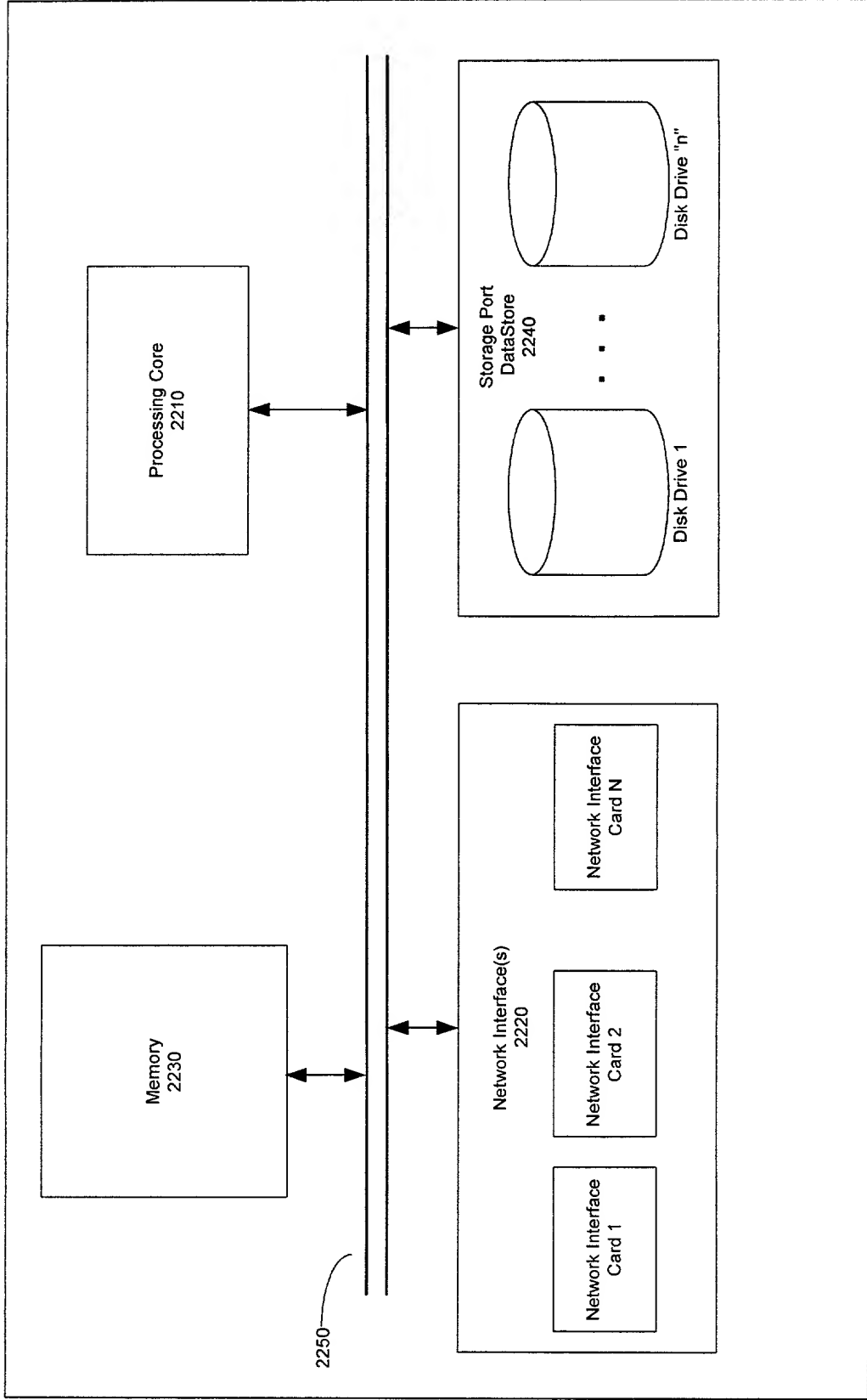
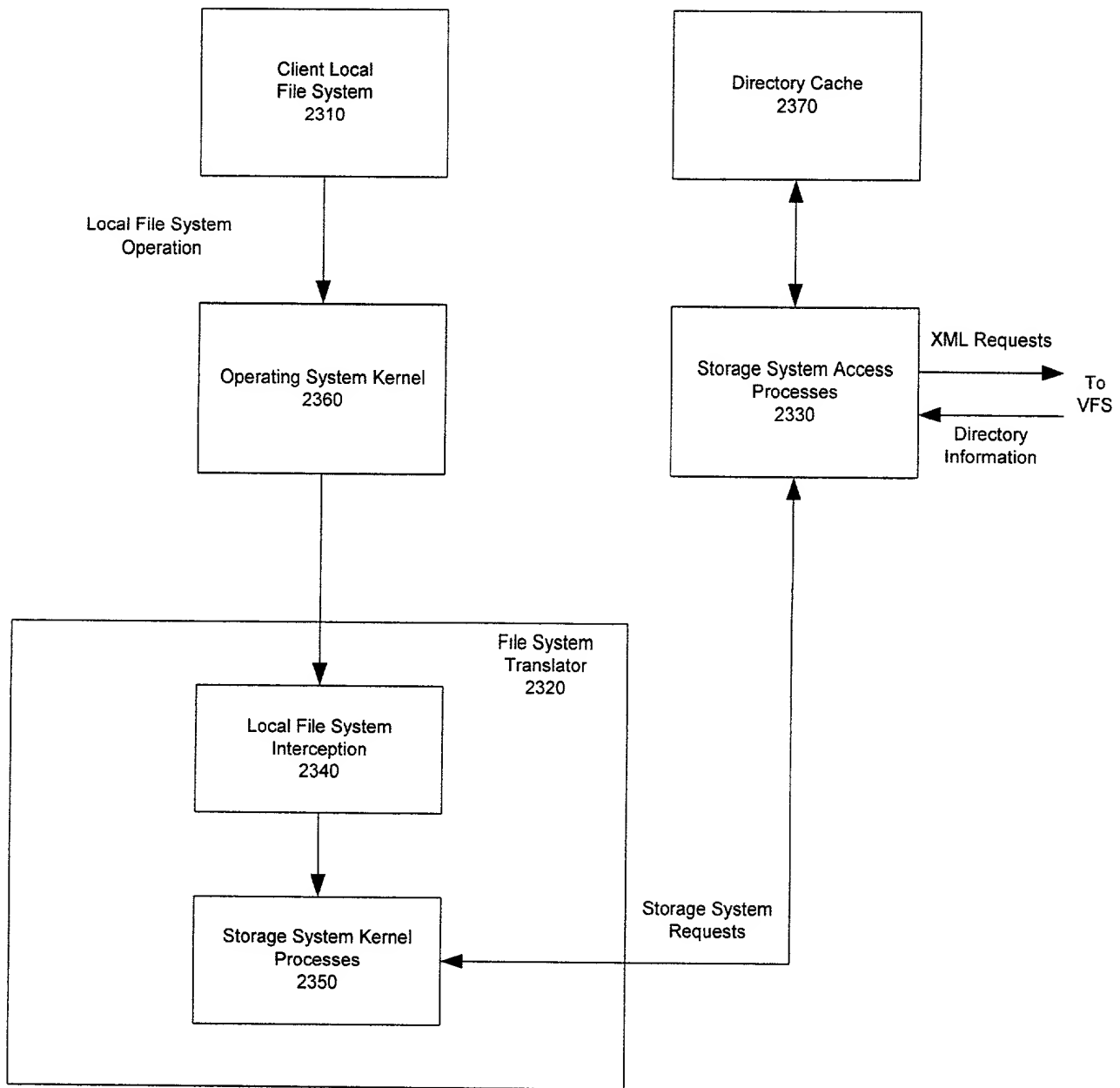


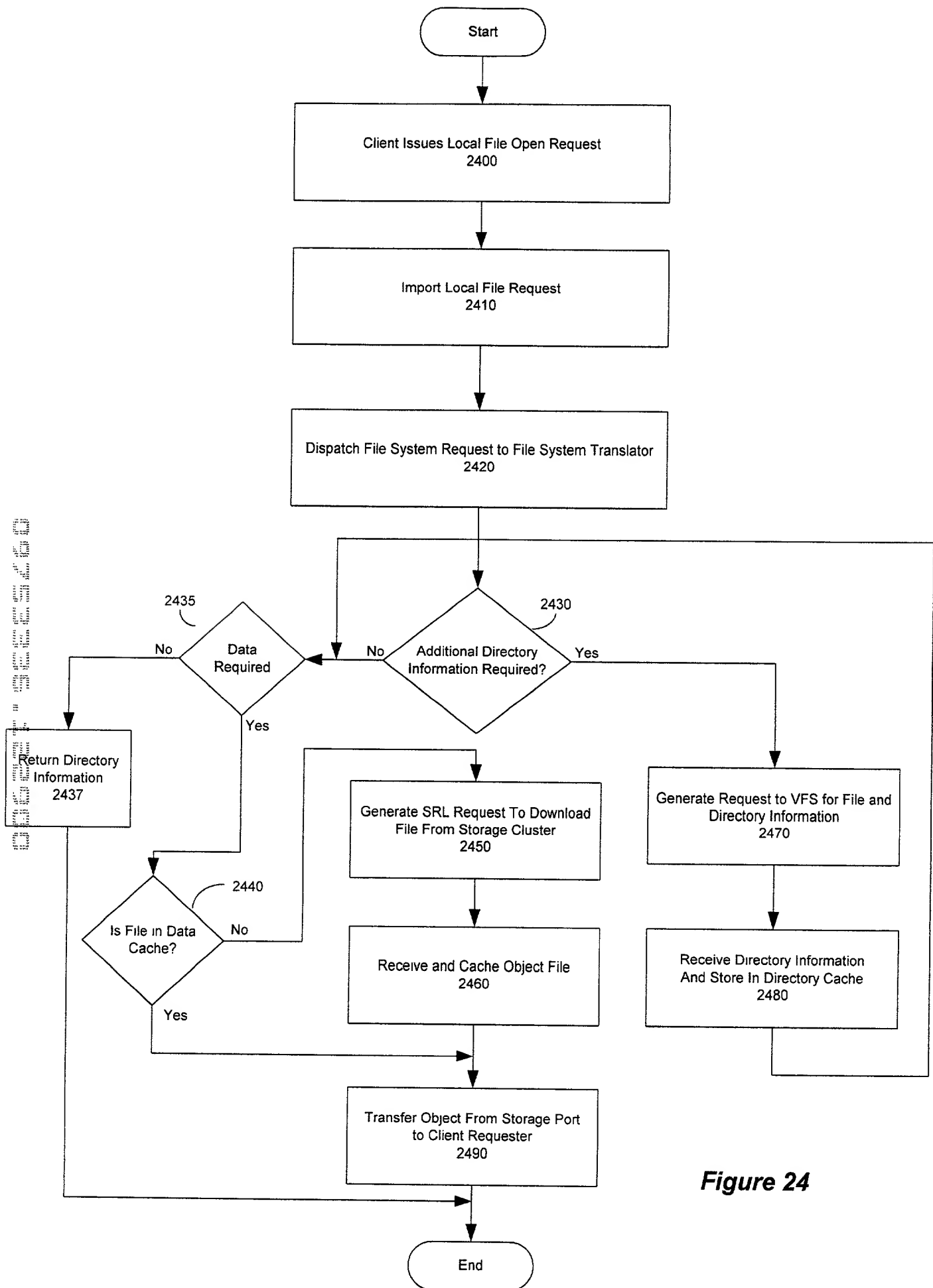
Figure 22

2300



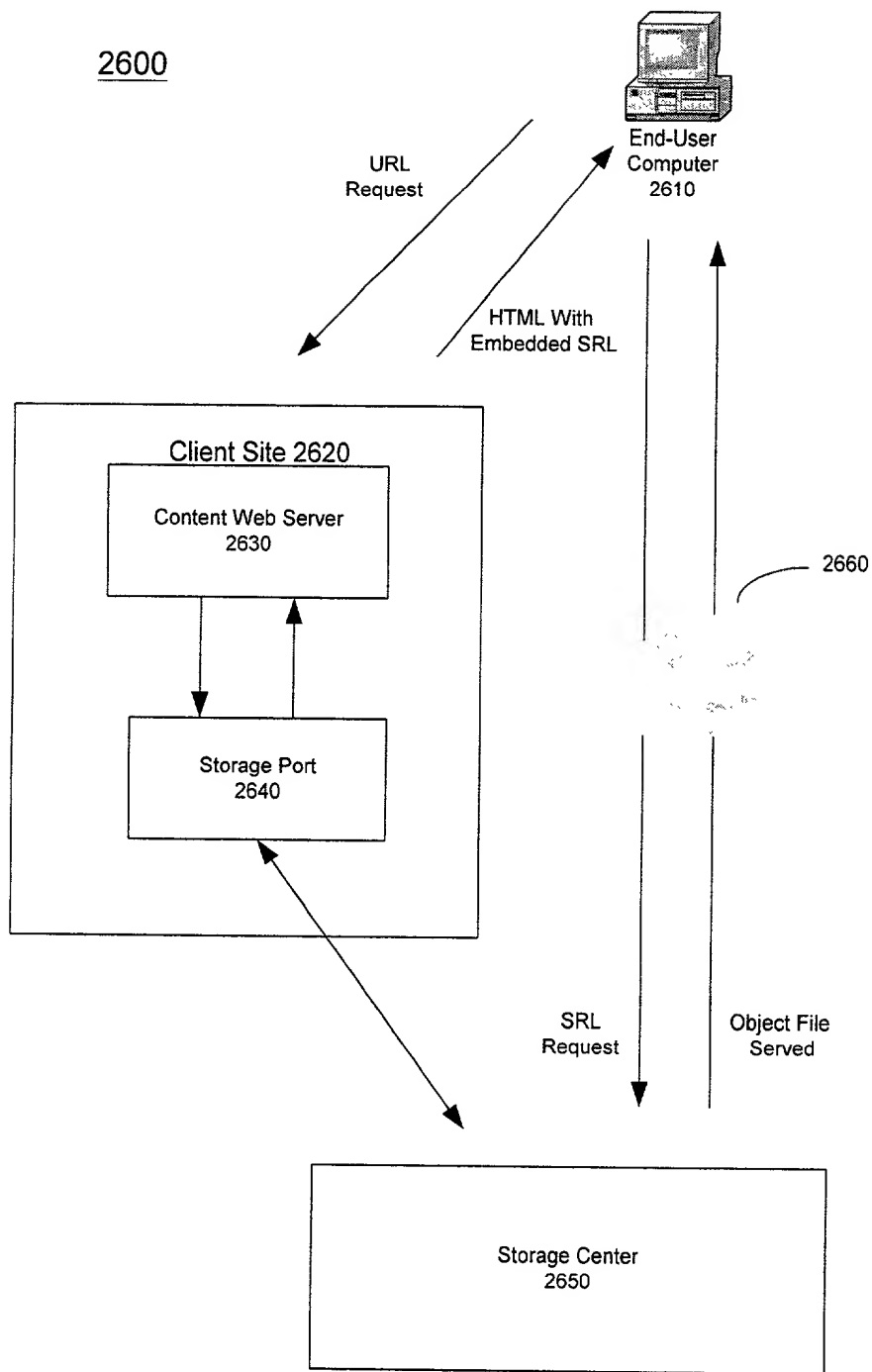
**Figure 23**



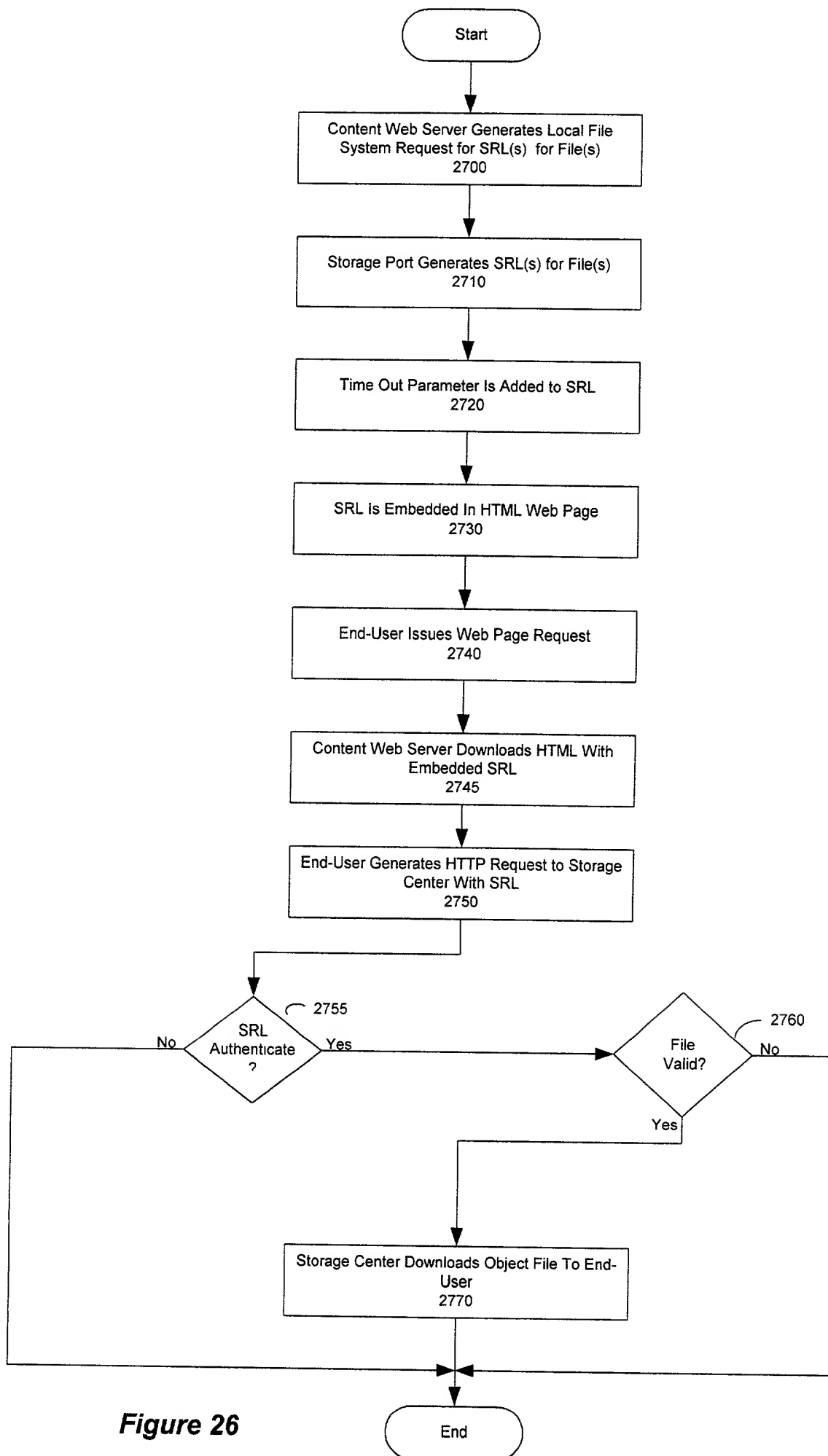


**Figure 24**

FIG. 25 is a block diagram of a system architecture for a client site and a storage center. The client site 2620 includes a content web server 2630 and a storage port 2640. The storage port 2640 is connected to a storage center 2650. An end-user computer 2610 is connected to the client site 2620 and the storage center 2650. The end-user computer 2610 sends a URL request to the content web server 2630 and receives HTML with embedded SRL in response. The content web server 2630 sends an SRL request to the storage port 2640, which then sends an SRL request to the storage center 2650. The storage center 2650 serves the object file back to the storage port 2640, which then serves the object file to the end-user computer 2610.

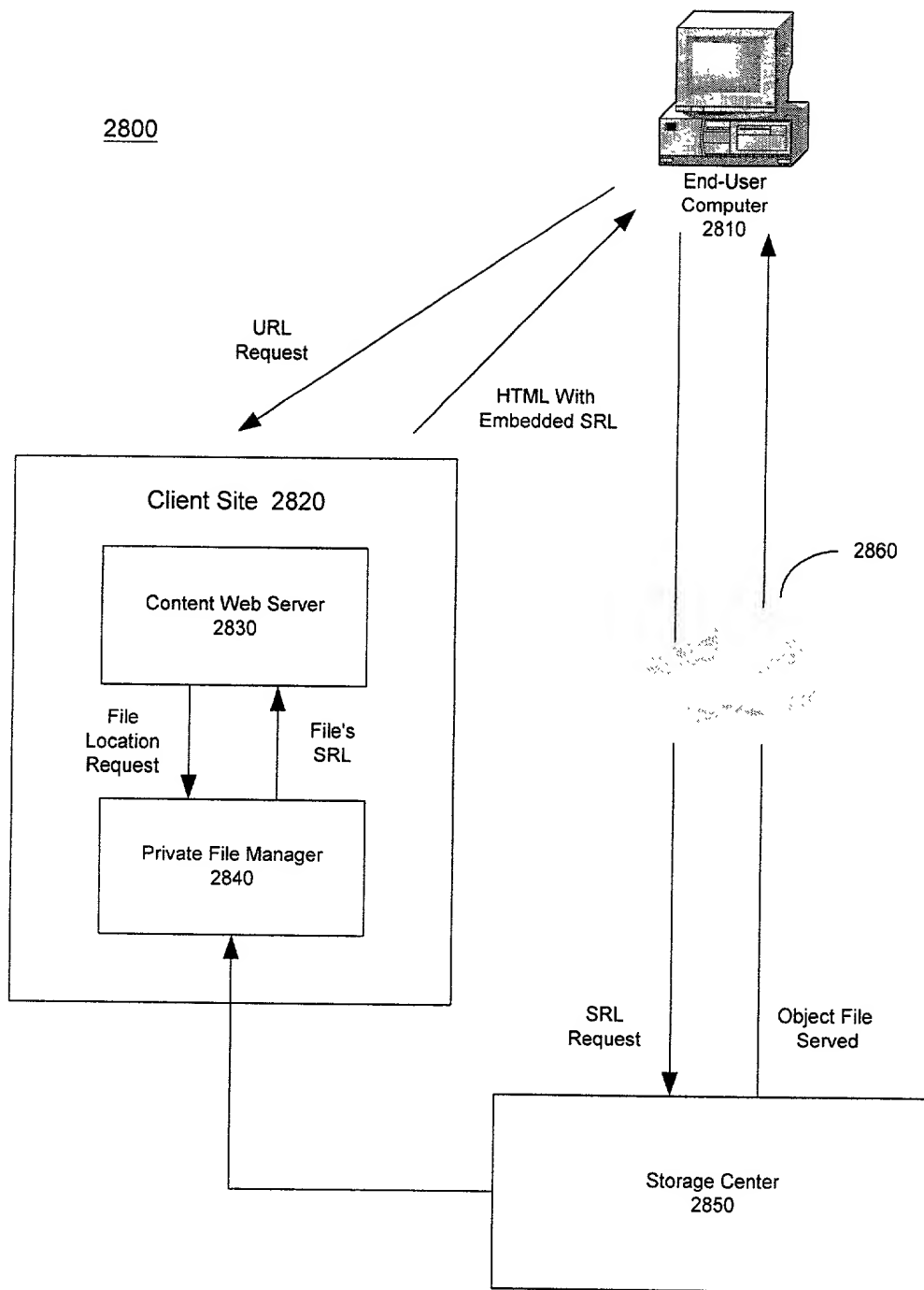


**Figure 25**

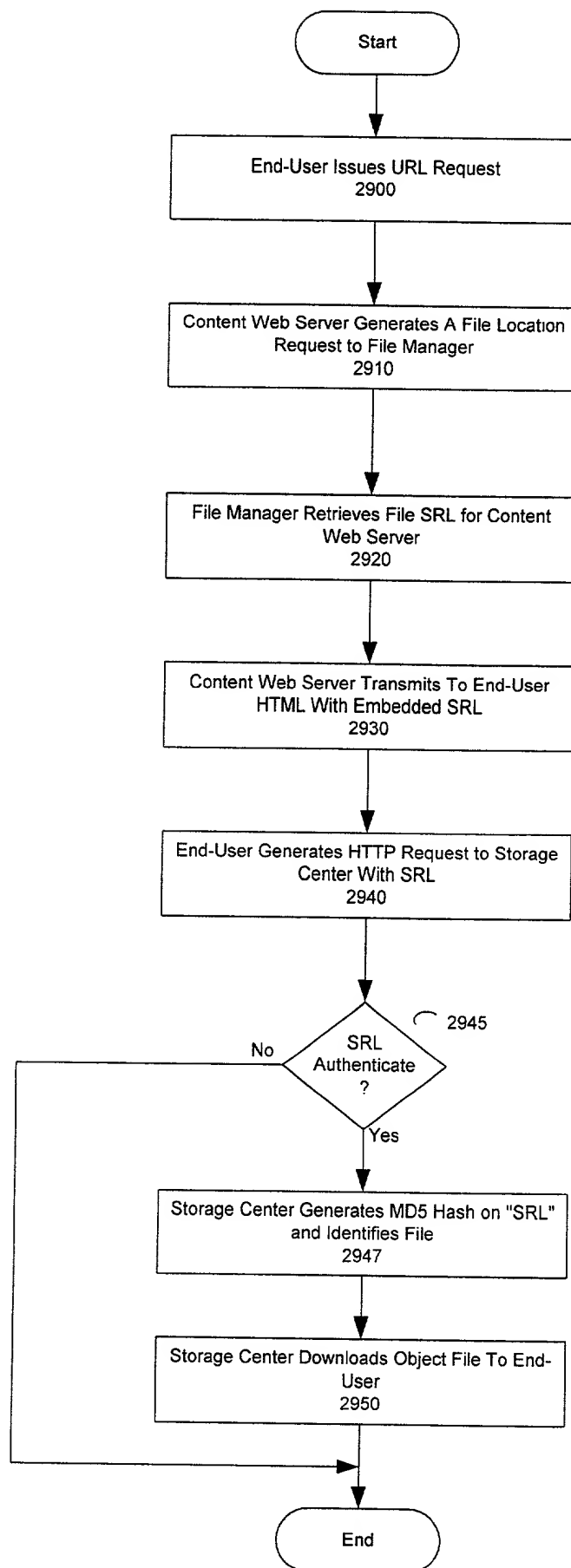


**Figure 26**

2800



**Figure 27**



**Figure 28**

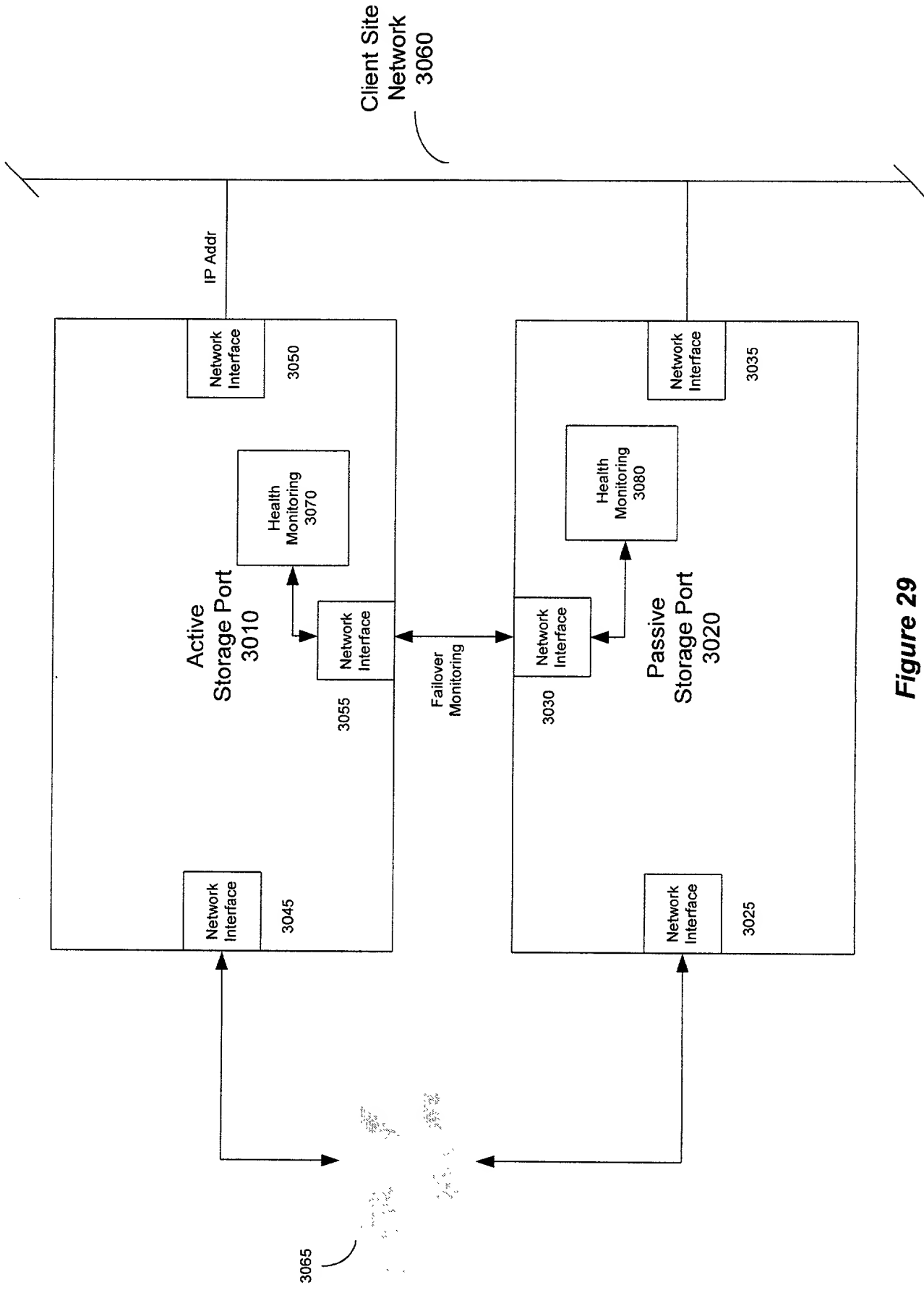
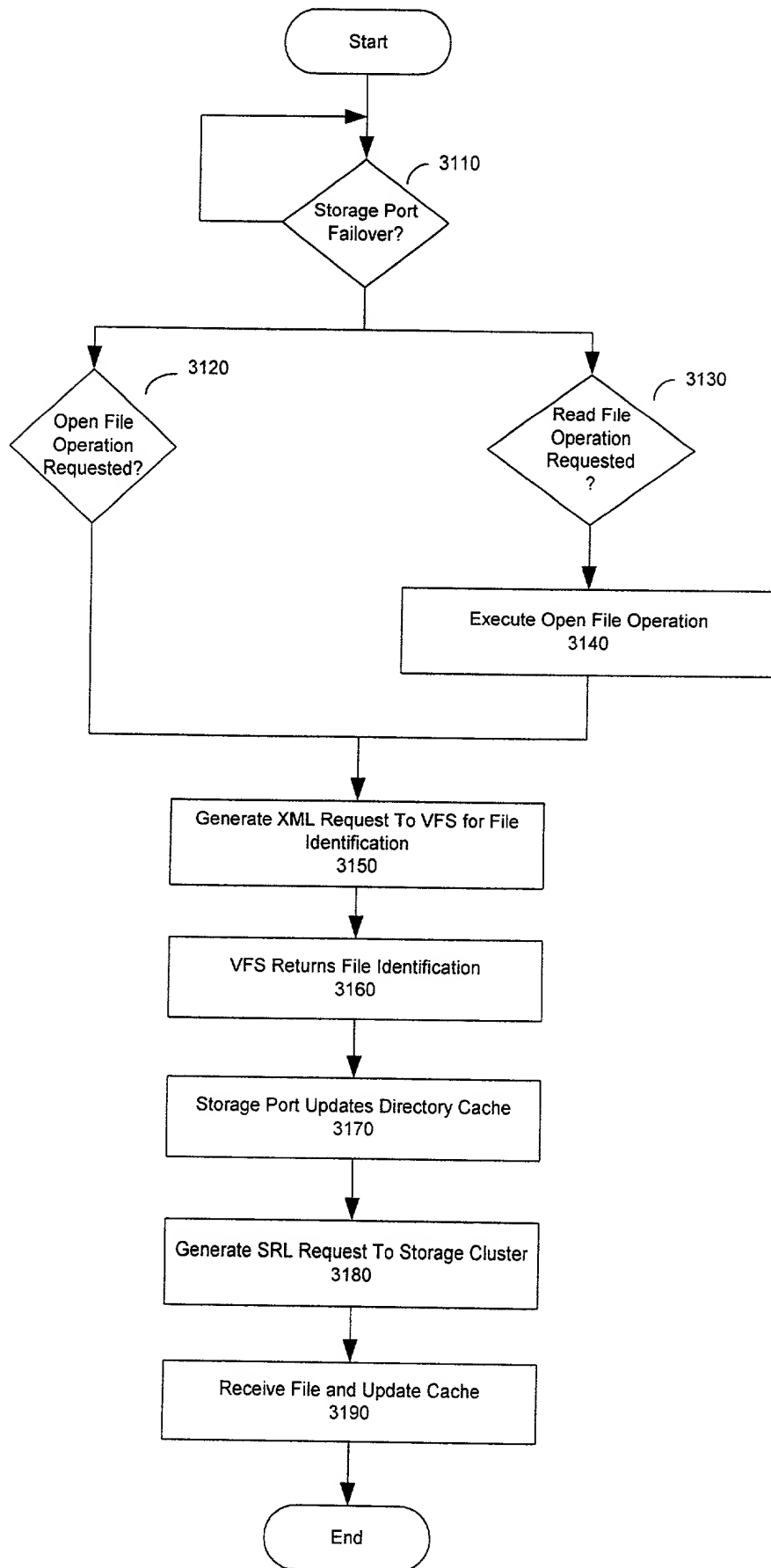
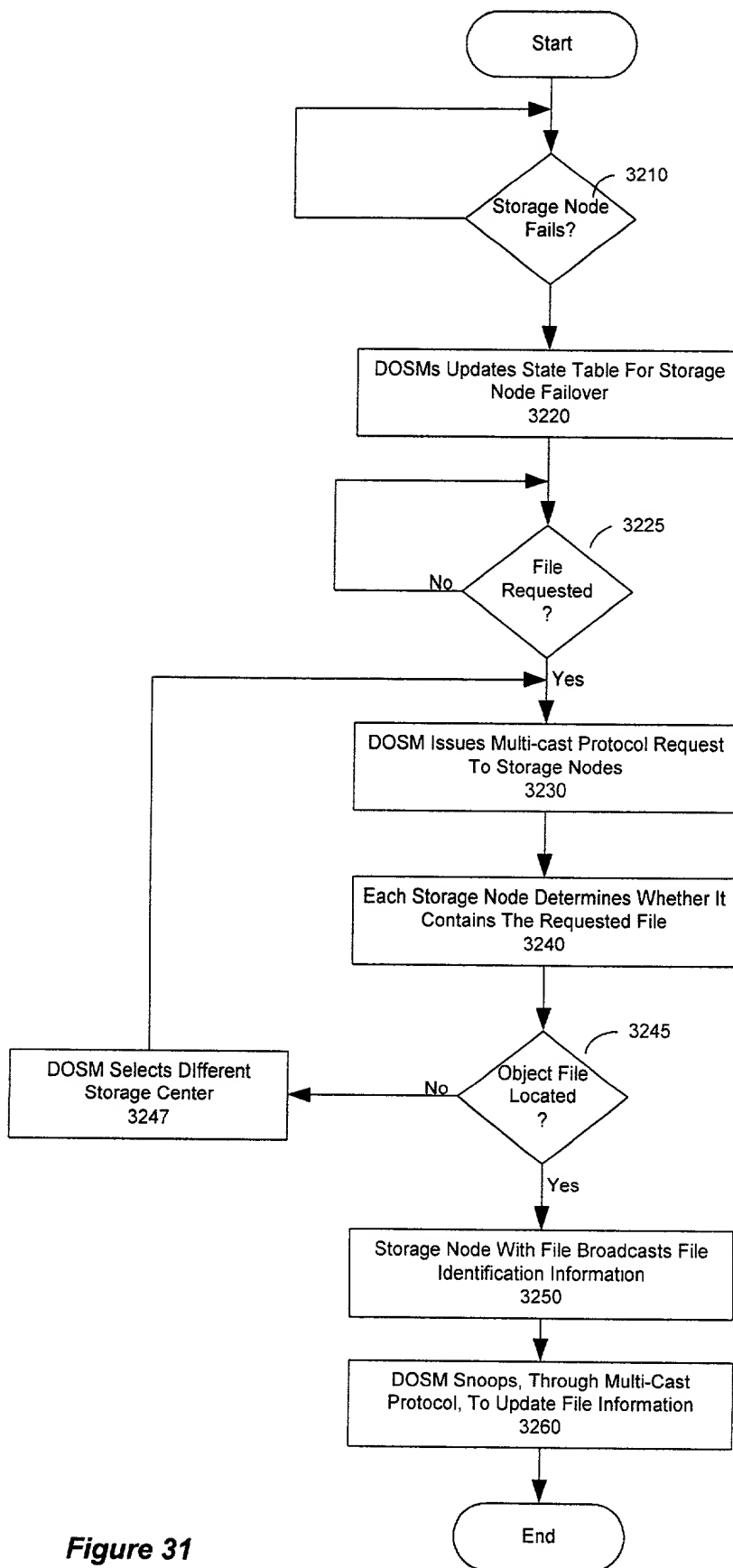


Figure 29



**Figure 30**



**Figure 31**